- <110> Fischer et al.
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                                                                      180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg
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aggageagta caacagcacg taccgtgtgg teagegteet caccgteetg caccaggact
                                                                      300
                                                                      360
ggetgaatgg caaggagtac aagtgcaagg tetecaacaa ageceteeca acceecateg
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc
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cateceggga tgagetgace aagaaceagg teageetgae etgeetggte aaaggettet
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atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga
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acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc
                                                                      660
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      and a Xho I restriction site.
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<210> 4
<211> 27
<212> DNA
<213> Artificial Sequence
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<221> Primer Bind
<223> Synthetic sequence complementary to the SV40 promter; includes a
      Hind III restriction site.
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<210> 5
<211> 271
<212> DNA
<213> Artificial Sequence
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<223> Synthetic promoter for use in biological assays; includes GAS
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      1:457-468 (1994)).
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gecectaact cegeccagtt cegeccatte teegecccat ggetgactaa tttttttat
                                                                      180
                                                                      240
ttatqcaqaq qccqaqqccq cctcggcctc tgagctattc cagaagtagt gaggaggctt
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ttttggaggc ctaggctttt gcaaaaagct t
<210> 6
<211> 32
<212> DNA
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<221> Primer Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
      sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
      Xho I restriction site.
                                                                       32
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<210> 7
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<213> Artificial Sequence
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<221> Primer Bind
<223> Synthetic primer complementary to human genomic EGR-1 promoter
      sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
      Hind III restriction site.
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gegaagette gegaeteeee ggateegeet e
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<400> 8
                                                                       12
ggggactttc cc
<210> 9
<211> 73
<212> DNA
<213> Artificial Seguence
<220>
<221> Primer Bind
<223> Synthetic primer with 4 tandem copies of the NF-KB binding site
      (GGGGACTTTCCC), 18 nucleotides complementary to the 5' end of the
      SV40 early promoter sequence, and a XhoI restriction site.
<400> 9
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                                                                       60
                                                                       73
ccatctcaat tag
<210> 10
<211> 256
<212> DNA
<213> Artificial Sequence
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<221> Protein Bind
<223> Synthetic promoter for use in biological assays; includes NF-KB
      binding sites.
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                                                                       60
                                                                      120
caattagtca qcaaccatag toccqccct aactccqccc atcccgccc taactccgcc
                                                                      180
cagttccqcc cattctccqc cccatqqctg actaattttt tttatttatg cagaggccga
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg
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eqqageeegg ageeegegee gageeeetgg cetegeggtg ceatgetgee eeggeggegg
                                                                    120
cgctgaagga tggcgacgcc gctgcctccg ccctccccgc ggcacctgcg gctgctgcgg
                                                                    180
                                                                    240
ctqctqctct ccqqcctcgt cctcggcgcc gccctgcgtg gagccgccgc cggccacccg
gaatgttgcc gcctgtcccg ggagcctgga ctgtgccctg aagaagcggg caagtgtcct
                                                                    300
                                                                    360
cctggtgcac atgcctgtgg gcctgccttc agcccttcca naaggaacag caaaggcttg
ttttgccang atgcgccggg cttcangcgg gggccgggcc caacccanac tngaaatgag
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attgatteet ggeecaaggg agettgeeeg gaaaggaatt tggacateaa tteegeeeta
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acccaaggac ggacagcggt tcccggagct tgccaccttg ggattntcgg cacgggggca
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ggggetggag etgggettee ettecaetee aggaaceeee acgeecaege cecacaenta
                                                                    600
ccatgggtta cccctgtgtc atccgacccg gtgcacatgt cgcccctgga gccccgggga
                                                                    660
gggcaaggcg acggcntcgc ccttgtgctg atcctggcgt tctgtgtggc cggtgcagcc
                                                                    720
geceteteeg tageeteent etgetggtge aggetgeage gtgagateeg cetgaeteag
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aaggeegagt aegeeactge gaaggeeetg getacacetg eagetaceee ggateteget
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tggggaccag cgcctggcac agagcgcgga gatgtaccac taccagcacc aacggcaaca
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                                                                    960
gatgttgtcc ctggagcggc ataaagagcc acccaaggag ctggacacgg ctcttcggat
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qaqqaqaatq aggacqgaga cttcacggtg tacgagtgcc cgggcatggc cccgaccggg
gaaatggagg tgcgcaacca tctgttcgac cacgccgcac tgtccgcgcc cctgccggcc
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                                                                    300
accagetgta teageteete agecagetee tetetagaga caccagteag attataccag
                                                                    360
aatatgttct gctcagegga gaactgcagt gaggagacac acattacage cttcactgtc
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agcaacacca gcgatgccct ggaccctccc ctgaagaacg tgtccagcaa cgcagagtgc
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gaagaacagt gtgtcyttct agttgcagaa cttaagaatg acattgagtc taagagtctc
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                                                                    660
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qcccttqcca qcctccttct tcggggactg ctgccctgag gtcctggggc tgcactttgc
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ccagcacccc atttctgctt ctctgaggtc cagagcatcc cctgcggtgc tgacaccctc
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tgctttctcc ctataccaaa ggagcaagtt taatatatag aaaattcctt catccacttc
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                                                                      420
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tgttgtccgt tttcaaattc atcaacagcc tagagtgcct gagatataag atgaaacaca
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gtggccaacg ccctcctgct ggtacctaat ggggagacct cctggaccaa caccaaccat
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ccagggattg cagccgttcg ggcaggggc aagggctgct gtggtgctgg gtgctgtgga
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                                                                      600
ggtgtcttct gcggcgattg caggaaaaaa caggacacac ctcactgagg ctccactgac
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cgcaccaccc tgagttggat cctctgtgcg ccacccctga gttggatcca gggctagctg
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ancagtettt gangetggtg gtttgaateg tgttgettae ettecaageg tgaacagtgg
                                                                      600
                                                                      660
acatctagtt cataaagaca cettgeacte tgetatgget gtggtateaa gaetetgtgg
caaaatggag cctcaagatt cttctttaga aatttgtgta naatctctgt ctagtttatg
                                                                      720
aaagcatgaa natcatcagg tttcagatgg agctctgcga tgctttgcat cactggctga
                                                                      780
ccgatttacc cgtcgtggtg ttgacccagc tccattagcc aagcatggat taactgagga
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getgttatet egaatggetg etgetggtgg taetgtttea ggaccateat eageatgeaa
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accagnicge agcaccacag gagetecate caccactgea gattecaaat tgagtaatea
                                                                      960
ggtgtcaaca attgtaagtc tgctctcaac actttgcaga ggctctccgg tagtaacaca
tgatcttctg aggtcggagc ttccagattc aattgaaagt gcattgcagg gtgatgaaag
                                                                     1080
                                                                     1140
atqtqtqctt qatactatqc gtttggttga ctttctcttg gtgctattat ttgaaggacg
aaaaqctttg ccaaagtcta gtgctggatc tacaggcaga atcccaggac tccggagatt
                                                                     1200
                                                                     1260
agatagttet ggggageget cacateggea gettatagat tgtattegaa gtaaagatae
cgatgcactt atagatgcaa ttgacacagg agcctttgaa gtaaatttta tggatgatgt
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gagagatgaa gatgggaaaa ctccattaga taaagctcga gaaaggggcc atagtgaagt
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<210> 19
<211> 1122
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (380)..(381)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (402)..(402)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (499)..(499)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (505)..(505)
<223> n equals a,t,q, or c
<400> 19
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                                                                      120
                                                                      180
ttgttttgtt ttacacttcc acacaatccc ttttcaattc cttgcaaact gctgagtatg
tactattttg ccagcaaagg ctgagcctgt atgaacccag ccatgtgctt tgtctgtgca
                                                                      240
tgtccccaca caggaagcac accagagaaa gcgatacttc agggtagatt gatttcatta
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ggaacttcat tatcaccage etcaaatggt tetggecage agtetttte tatetgtatg
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attaaccett etetgeegen nageacetee teccaccace tntteteagt gttaacaggt
                                                                      420
gatctagact cctactctca gagaaaattg aagccaacaa gtagaaagtc ttttttgcta
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ccaaagacac aaacctatnt tgttntgcat ccatcctcac ccccgctggt gcttgttcaa
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cacaggagte etetetecae etacecaaag cetgteceet cetgetgtge cetggatett
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atototgtca ttgccttaga aacotttott gtatatatto atotttttoc ttcaatagat
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ctttcttatt ggattttaag catgttgcag cctcttctgt taataaaaca acaatcaaca
                                                                      720
                                                                      780
aaaacactct cccttaactg catgetttat tecagetact accttatate attectttee
                                                                      840
ttcaaggcca aagtcctcag aagaggtggc aatatcctcc atcatttctt cacttcatac
```

<213> Homo sapiens

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tcattcttca acacatacta atctagtctc ttaccccata attcattaaa acacttattc
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                                                                      960
                                                                     1020
cottagattt tagtatttca coctattqqc cattettttc ttcttgaaat actetetect
ttagetttta tgacactgta etectggttt tteteccatt tettgtetge teetgettag
                                                                     1080
                                                                     1122
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<210> 20
<211> 1368
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (637)..(637)
<223> n equals a,t,g, or c
-22DS
<221> misc_feature
<222> (1140) .. (1140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1170) .. (1170)
<223> n equals a,t,q, or c
<220>
<221> misc feature
<222> (1286)..(1286)
<223> n equals a,t,g, or c
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                                                                      180
cecetggtgg tcacggccca geegggeyeg gggcegeege gacceteeeg gegeetgewa
gacctgagcg tettecggga cegeggettt gtgetttaeg cegtggeege eteggteatg
                                                                      240
                                                                      300
gtgctggggc tcttcgtccc gcccgtgttc gtggtgagct acgccaagga cctgggcgtg
cccqacacca aggccgcctt cctgctcacc atcctgggct tcattgacat cttcgcgcgg
                                                                      360
ccqqccgcgg gcttcgtggc ggggcttggg aaggtgcggc cctactccgt ctacctcttc
                                                                      420
agetteteca tgttetteaa eggeetegeg gacetggegg getetaegge gggegaetae
                                                                      480
ggcggcctcg tggtcttctg catcttcttt ggcatctcct acggcatggt gggggccctg
caqttcqaqg tgctcatggc catcgtgggc acccacaagt tctccagtgc cattggcctg
gtgetgetga tggaggeggt ggeegtgete gtegggnece ettegggagg caaacteetg
                                                                      660
gatgcgaccc acgtctacat gtacgtgttc atcctggcgg gggccgaggt gctcacctcc
                                                                      720
tecetgattt tgetgetggg caacttette tgeattagga agaageecaa agageeacag
                                                                      780
                                                                      840
cctgaggtgg cggccgcgga ggaggagaag ctccacaagc ctcctgcaga ctcgggggtg
gacttgcggg aggtggagca tttcctgaag gctgagcctg agaaaaacgg ggaggtggtt
                                                                      900
cacacccegg aaacaagtgt ctgagtggct gggcggggcc ggcagcacag gggaggaggt
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acagaagccg gcaacgcttg ctatttattt tacaaactgg actggctcag gcagggccac
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ggctgggctc cagctgccgg cccagcggat cgtcgcccga tcagtgtttt gagggggaag
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qtqqcqqggt gggaaccgtg tcattccaga gtggatctgc ggtgaagcca agccgcaagn
                                                                     1140
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atgeteaagg acetggaaac ceatgetteg agacaacgtg actttaatgg gaaggqtqqg
                                                                     1260
                                                                     1320
tgggeegeag acaggetgge agggenggtg ctgcgtgggg ccctctccag cccgtcctac
cetgggetea catggggeet gtgcccaccc ctcttgagtg tcttgggg
                                                                     1368
<210> 21
<211> 1188
 <212> DNA
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<222> (577)..(577)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (1022)..(1022)
<223> n equals a,t,g, or c
-220×
<221> misc_feature
<222> (1052)..(1052)
<223> n equals a,t,g, or c
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actggtctcg aactcccgac ctcaggtgat ctgcccacct cggcctccca aagtgctggg
attacaggcg tgagccaccg agcctagccc tgtttaggct ttttatagcc tatgttctta
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tgagcagtaa acattatgaa tggtttagtt agacctgttg aattgaattc acttcttctg
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cctgtggtca ggtatcaggt agcacagcca cagaagttac tgaatgtctt tgttggtgga
                                                                    300
                                                                    360
ctttaggaaa gtggtttaat ttatgtggta ttcctatctg ggaattgcaa cagtattgtt
agattgcatt ttgtcacagg gaggaaatta cctggtaact ccctgattag gaacaaaatg
                                                                    420
aagetteece tttttacaaa teetggetaa catteeattt ggatetette tgttgaacae
                                                                    480
ctctctctct cccctccctc ctcactccat tttctcagtt attttattgt ttactattgg
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aagtcacctc ccaactcagg atacttgtta gtccatntta ggaaaaatat caccattctt
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toactattat tototgttga agttgaagaa cagaatatta otttttttot ttocattatt
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ggttacacca gctagttaga gacttggggt aatactgtgg gcatgggttg gatcctgata
                                                                    720
tetgtgtcag ttagtgagag ttggttctat gaccetagag etetttgtgt cettcaaacg
                                                                    780
agggtgctga aacaagacga acatagaact gtctatacca agcaaaaaac tcctgaaagc
                                                                     840
acatgeceae tgeaggtgaa ttggtageat agtgtggaga taagtgggea gtgettggte
                                                                     900
                                                                     960
ctgtttctgc ctcctagaga gtacctctca gcatccaggg atgctttagt aactcttagt
                                                                    1020
taaaacqaaa tgaactataa ttaattacct tttttttggg ggggacacag agagtttcca
engeatttae catgettttt ttttttttt gnaaaggaaa tatgatagga tattaagatt
                                                                    1080
                                                                    1140
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1188
<210> 22
<211> 921
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (111)..(111)
<223> n equals a,t,g, or c
<400× 22
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                                                                     120
aagctgttct attcgttctc gcctggtttg gaacaaactg aacacttcca aaggaggcag
                                                                     180
teettgeage ettgteteet teeacteece teeteeceae agteetggge tggageageg
                                                                     240
agtotgtoga toccagggoo agagacaagg cagacaaagg ttoatttgta aagaagotoo
                                                                     300
                                                                     360
ttccagcacc tcctctctc tccttttgcc caaactcacc cagtgagtgt gagcatttaa
gaagcateet etgecaagae caaaaggaaa gaagaaaaag ggecaaaage caaaatgaaa
                                                                     420
ctgatggtac ttgttttcac cattgggcta actttgctgc taggagttca agccatgcct
                                                                     480
gcaaatcgcc tetettgcta cagaaagata ctaaaagatc acaactgtca caacetteeg
                                                                     540
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gaaggagtag ctgacctgac acagattgat gtcaatgtcc aggatcattt ctgggatggg
aagggatgtg agatgatetg ttactgcaac ttcagcgaat tgctctgctg cccaaaagac
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gttttctttg gaccaaagat ctctttcgtg attccttgca acaatcaatg agaatcttca
                                                                     720
tgtattctgg agaacaccat tcctgatttc ccacaaactg cactacatca gtataactgc
                                                                     780
```

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atttctagtt tctatatagt gcaatagagc atagattcta taaattctta cttgtctaag
                                                                      840
acaagtaaat ctgtgttaaa caagtagtaa taaaagttaa ttcaatctaa tttttctctg
                                                                      900
                                                                      921
togaaaaaaa aaaaaaaaaa t
<210> 23
<211> 1838
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1076)..(1076)
<223> n equals a,t,g, or c
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                                                                      120
gatccacctg cctcggcctc ccaaagtgct gggattacag gtgtgagcca ccatgcctgg
                                                                      180
ggcaaaagat attttcaaaa cattgtmaat aacttctccc ccaaacccag acagggtctc
                                                                      240
attetgttge ccaggetgga gtggcagggg caccategta geteactgea geettgaaca
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ccggggctca agcaatcctc ccgcctcagc ctgccaaagt gctgggatta cacacgtaaq
                                                                      360
ccagtgcact cagtcctaag taacttttta aataccaaag gtagaaaagg aagaagaggg
                                                                      420
aaaaaaaaaa taagcccata tatggaaaag gaaaagacag cagataaata taggcaaata
                                                                      480
gaggtggaaa atataatcac gtagaattta gtatagtaaa ggattatctc tgaaaaacaa
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aaacagaaaa ctatcagagc caaataaaga aaaatggaaa tgactgggga aaaccactca
                                                                      600
                                                                      660
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attatcacct gttaaataag aatgcatagt aaatggaatg gacaaagaat atgagtgaca
                                                                      780
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gatcacctga gcccaggagt ttgagataag cctgggtaac acagtgagac tccatctcta
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aaaaaattaa aaagtaaaaa aaaattagct ggtcatggtg acacacacct gtsgkccyas
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ccatgattgt gccactgcac tccggcttgg gtaacaaagt gagatcctat tttccatccc
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                                                                     1440
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ttgtagtttc aaaataaaat cataaagtta tctcaaagcc aagcaaaaaa attatttggt
                                                                     1740
                                                                     1800
acaaagtagc aaactcgctg cattagaaga aaaggccatt tcttcacata tttgaataca
                                                                     1838
ggcaccaaca catagttcca catgaaatta tatttcgg
<210> 24
<211> 697
<212> DNA
<213> Homo sapiens
```

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~220×
<221> misc_feature
<222> (57) .. (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (662)..(662)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (680)..(680)
<223> n equals a,t,g, or c
<220×
<221> misc_feature
<222> (690)..(690)
<223> n equals a,t,g, or c
<400> 24
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                                                                    120
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tgtccagcag catccggctt catgggggga cttgaaccet gcagcagget cetgcteetg
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cctctcctgc tggctgtagg tctccgtcct gtccaggccc aggcccagag cgattgcagt
                                                                    240
tgctctacgg tgagcccggg cgtgctggca gggatcgtga tgggagacct ggtgctgaca
                                                                    300
gtgctcattg ccctggccgt gtacttcctg ggccggctgg tccctcgggg gcgaggggct
                                                                    360
geggaggega ceeggaaaca gegtateact gagacegagt egeettatea ggageteeag
                                                                    420
ggtcagaggt cggatgtcta cagcgacctc aacacacaga ggccgtatta caaatgagcc
                                                                    480
cgaatcatga cagtcagcaa catgatacct ggatccagcc attcctgaag cccaccctgc
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acctcattcc aactcctacc gcgatacaga cccacagagt gccatccctg agagaccaga
                                                                    600
660
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<210> 25
<211> 628
<212> DNA
<213> Homo sapiens
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atacaaaaga aaaaaaaaag aaaacaaatc tttcagaatt gtttgaagta agaacaagac
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gecattcage aaggacagaa etggagatgg ettetettt acaaagaaat etetgteeca
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tegteatece cagecaaact ggeetgeaag egeactgaet tecacatece tageatttag
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gcctttgaat agaagctgac acgtagcagc cagctgaaca agtatttaat gaggagcaac
                                                                    540
acaactccaa gaagggctcc ttagtgtatt gtcaagttgc tgcagccttg tgagatggaa
                                                                    600
                                                                    628
aaaaaaaaa aaaaaaaaaa qqqcqqcc
<210> 26
<211> 1422
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1397)..(1397)
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<400> 28

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<223> n equals a,t,g, or c
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aagataggtt taaaaactat gaatccattt tcagtattty cttctctctg tttgaaacag
                                                                      120
tttgaggatg tgtytctttt tcttggcttg atgtttggta sgtccttgaa tgggcaagag
                                                                      180
ggcacatgaa gtacggcgtc ctccacattc acggcctcta cacgggaccc ctgcggggtg
                                                                      240
ggtgetggae ccateggggt ataaagaegt caeteaagae geagaagtea tggaagteet
                                                                      300
ccagaactta taccgcacca agtcctttct gtttgtgggc tgtggggaga cccttcgtga
                                                                      360
                                                                      420
tcagatattc caggccctct ttctttactc cgtgccgaat aaggtggatt tggagcacta
                                                                      480
catgettgtg etgaaggaga atgaagacca tttetttaag catcaggeag atatgettet
gcacggaatc aaagttgtat cctacgggga ctgttttgac cactttccag gatatgtgca
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gagtgccact cctgatggga gaggaggccc atgacagtga cagtcatgct agtgatcgcg
                                                                      660
gacaccacac catgetgeet ttgccagetg geteetteag egagteeteg caccaageet
                                                                      720
gggaggtaga gatgctgatc gcgtggacag caccacatta ttgggtaatg catgccagga
                                                                      780
                                                                      840
ctgtgcaaag aggaagttag aagagaatgg aattgaagtt tcaaaaaaac gcacacaatc
                                                                      900
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gtgattcccc cggactccac tgtctgaaga ccaggtttcc tatgaagagg gtctgatggg
                                                                      960
                                                                     1020
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ctgcaacttg aaaactagec tttctgtaac cacagtgccc aaacgaagag gaatgtatgg
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agaactccac gtggatctct gattgggaaa ccgtcacata caccaagaga gccacatggg
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catgtggccc tcaaggctgg gtgagagggc tcccctgtgt gttgaactat gcaggagggt
                                                                     1200
gacgcggaca catttcaggt ggactttgca aggactgatg gatagctacc tcagggacca
                                                                     1260
gaateegtgg gaagggatgg acctggtgtt ceegtteeca tetgacagge tetettttgt
                                                                     1320
                                                                     1380
ccaaggtggt atttttcgta ataaaagggg aagagtaaar amwrwmmaar maamagtagc
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<210> 27
<211> 795
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)..(3)
<223> n equals a,t,g, or c
<400> 27
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gggttggcct gaactctgcc aaacaaatat caaagtgtat ttaatagtta aatttgtgcc
                                                                      120
ctttcccttc ttgctgcacc catgttgtca cttaaccccc aggagttatt tattatcttt
                                                                      180
                                                                      240
ttgttaaagt caggctcatt tggggtaatg tgatgactgt ttaggtttac atgaccctcc
totootttoo otaccoccaa atatgtatat atacatatat aaaatatgta tatattttac
                                                                      300
                                                                      360
ctatataaaa tatatata tacacatata tgtatctata ttcctttgtt tctttgcctg
                                                                      420
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gggaatgcca taatggaggc ttttggatct gaatttggac catttcacta aagagaacat
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gagtttgctc agccctttcc tcacaagagg gagggccccg gttccccaga cttctccacg
                                                                      600
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360

420

480

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<211> 1767
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<213> Homo sapiens
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<222> (717)..(717)

<223> n equals a,t,g, or c

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<221> misc feature
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                                                                      360
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                                                                      660
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                                                                     1543
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<210> 41
<211> 2095
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<213> Homo sapiens
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1092
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<223> n equals a,t,g, or c
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<221> misc_feature
<222> (385)..(385)
<223> n equals a,t,g, or c
<220>
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<221> misc_feature
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413
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720
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<213> Homo sapiens
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                                                                   660
ttgaacccag gaggcagagg ttgcagtgag ccgagatcac accattgcac tccagcctgg
                                                                   720
gcgacaatag caaaactcca tctcaaaaaa aaaaaaaaa aaaaaaaggg cggcc
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<210> 46 <211> 506 <212> DNA

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<213> Homo sapiens
<220>
<221> misc feature
<222> (13)..(13)
<223> n equals a,t,g, or c
<400> 46
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cgcgttggcg gccgctctag aactagtgga tcccccgggc tgcaggaatt cggcacgagc
                                                                      120
acctcctgag gaatatggtg taggaaagcc acccgcgtgc tttctggctg ggatggctct
                                                                      180
cttccttggc tgctggaggc actggagaga ggtctgataa ggatggctgt atggatcagt
                                                                      240
gggtcttatt cctcattctg cagcagaagc aactgggatg ttttttctcc taatattgtg
                                                                      300
ctggcttctc tgcctttctc tttccggtct gtatccaagg ctgctaaacc ctggtggctg
                                                                      360
                                                                      420
getetecetg etetettee agatggatta tggetggatt etgecatggg gagettgtae
                                                                      480
agtcagacat ggaaagccag gaatgggaaa gaggtcaggt ggttctctcc cacacctcac
                                                                      506
tgeettggtg ctatgtetca ectega
<210> 47
<211> 1447
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1420) .. (1420)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1432) .. (1432)
<223> n equals a,t,q, or c
<220>
<221> misc feature
<222> (1436) .. (1436)
<223> n equals a,t,q, or c
<400> 47
caagegegea agggegeggg egageaggee tgtgaatteg caggateatt teagaceege
                                                                       60
acttoggcag ccaactogaa agcaggoggt tgtgtgcggc agcagttggc gtttgctttg
                                                                      120
cacttoggaa cotgttgcgt tttgacccac ggaggtggag gagtaacttt ttgacatgtt
                                                                      180
ggcctttcca gttttgttgg aagtttcatg gtcggttttg tttygtttct cattcttctc
                                                                      240
tocksgcccc tcagcccccc aacccccaac cccctcccgg tccgtgttgc atgcacgctg
                                                                      300
ttcaaatgtg aggtctgaaa tggctggcac acgggaaaag ctgcttgtgt cattcgtttc
tgggagtggg atggctctga gcagcctcgc ctccctgttt gtactatttg aactttgcag
                                                                      420
atototgtto totoaagcag aactoccaac cagatocatt ottgaccagt gaccggoteg
gaatctggcc ttttgtgtga gatgatcacg gtttcttttg tttatcacgc catttgcaaa
                                                                      540
tcagagcaag agctctttct caagggcaag aaacgcaaac aagaaatatt tgtgagatga
                                                                       600
aagttgtcaa ttggattttc ttcctaaaca aacaacaaca acaaactact agaagtctcc
ctgagtccac tcgcttggat ttctgacaca gtttacaaaa aaggaaaaag gcactgctcc
                                                                      720
                                                                      780
tattttccct tatggctgag ttcaccttaa gattgtaaat gtgtatatgt cagtgaaaac
attgaggett ggaaaatgtg ttattttegt tgeectaagt ttgagtegae tttagaetea
                                                                      840
                                                                      900
aaaacatttt gagcgaatat caaagttaac ttttaaaaaat tgcgaaacta tttcagaatc
gcaattttat cgaagattaa atcagacttt tttgtctggt aattatatat ttattattta
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gcaaaactga agaaaaaaag cacagaattg tttcaacaga tgtctctcat tttcagctag
                                                                      1020
catttetete ccaagttgag etggtttaat gtgttttgga ttteeeteet caattggett
                                                                      1080
attttttaga tcacctgcaa ttcatttgca aattgcaata aaacacattt tagaaaaaag
                                                                      1140
qaaccttcaa ttattagctt tgtttctttt taaatgtata taaaaagact aatgtttgtg
                                                                      1200
                                                                      1260
aatgaagttg gctaacatgt atttagtttc attttggctt tatgtaatat aaagttttta
aaattttaaa tatggtttta acctttatgt gtaaatgatt ttctagtgtg accttctaat
                                                                      1320
```

```
ttaatattag acgtctaagg tatatctgta aattagaatc cgactatcac tctgttcatt
ttttttgaac aaagagttta aataaagcct gaaccagggn acagataaag anaatnaaaa
                                                                 1440
                                                                 1447
aaaaaaa
<210> 48
<211> 1420
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (524)..(524)
<223> n equals a,t,q, or c
<220>
<221> misc_feature
<222> (585)..(585)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (596)..(596)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1042) .. (1042)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (1062)..(1062)
<223> n equals a,t,g, or c
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<222> (1144)..(1144)
<223> n equals a,t,g, or c
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<222> (1171) .. (1171)
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<222> (1286) .. (1286)
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<220>
<221> misc feature
<222> (1350) .. (1350)
<223> n equals a,t,g, or c
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                                                                   120
ggacagaggg aagagaaggg ccagccagcg gcagtggagt cggcaggctg gctgcccact
                                                                   180
cgctttctct cctcacaaga ctcgcttccc ctgtcttcga ggatctcgaa cggactatag
                                                                   240
tetggaeteg etgggetgga ggaaaettgg eegetggeea eeeggaggag aetgaaaate
                                                                   300
360
```

```
420
aacgcccagt gtcgcctgag agccctggag ctgcgcgaga cccaggcact gagtgcggcc
teggeetetg acetetaaca egeegggaac aaaceatetg gggeggeeeg caggeetgeg
                                                                      480
ggageggaat gtgaceegaa acegaeegae tteetgaeee atanteeata gttetettea
                                                                      540
gcaacttgaa cattttggaa aaagaaacaa tettaacatg ccacnaccta atgganaaac
                                                                      600
taaatcccct tcctacacct tgctttccaa aagttaaaaa aaaatagtta aacgctatta
                                                                      660
gaggtotcaa gttcactgto accagatoag ctaggtocag aatottcagt tottgaagco
                                                                      720
aagccctaca aatagattta ttgtagcata tcacacctct tcaggtgact taaaacaatg
                                                                      780
agaattcatg agaaattatc ttcatcctca agtaaaaatc atgaggtgcc tttcacatgg
                                                                      840
atgaaattgt aagtgcttgt tgaacaagga ataattggat aatggtattg tggtcatact
                                                                      900
ttttaagaat atctgttaga aagatatagg atgcagaaca tctaggattt gctgaaagtc
                                                                      960
                                                                     1020
atttattatg gatagggggt atgagtaagt tcatagatga aaagggatga aacaagattg
gccatagttg ctctattttt gngtatcttg tttctttatt tngtttcttt aaaaagtcct
catatcactg acatttacac ttagttttag ggaaagtcaa atttagaaat aagctacagc
                                                                     1140
tetntaaget ateggtetaa etggattttt ntegatgetg aagaactttt taaaaaatte
                                                                     1200
agccatttag gtcacacagc aaatacattt ggcattaaat tcctagtatc actaaagtac
                                                                     1260
teceteccae egeogegeee ecceenttee eccegeacce ttagacetgg geaagagaga
                                                                     1320
cttctatcct ggactccatg ctttaaaggn acttacatat cacacacaca cattaattta
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                                                                     1420
aaaaggaaaa aaaaaaaaaa aaaaaaaaaa
<210> 49
<211> 1220
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1197) .. (1197)
<223> n equals a,t,q, or c
<220>
<221> misc feature
<222> (1208)..(1209)
<223> n equals a,t,g, or c
<400> 49
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                                                                       60
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acccaagttt cttgcttctc caaagtattc ttctcatagc ttataaaaga aagtccacat
tgaatagcat ggtctgggaa cattccttct ttattgtgtt tatttgaaca tgatatgagt
                                                                      180
ttccaaqatg aaatgatcaa aaaagataag taccacaaga aagttttttt gtttggttgg
                                                                      240
ttttttgtt tgtttgttt tttcttgaga ctgagtctct ccctgttgcc caagttggag
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tgcaatcttg gctcactgca gcctccacct ccccggttcc agcgattctc ctgcctcagc
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ctcttgaata gctgggatta caggcgcccg ccaccacacc tggctaattt ttgtgttgtt
                                                                      420
agtagaggcg gggtttcatc atgttggcca ggctggtctc gaactcctga tctcatgatc
                                                                      480
cgtctgcctc ggcctcccag agtgctggga ttacaggcat gagccactgc gcccggccaa
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gaaagtatgt ttttagaggt gtgtgtaagt gcatttgtat tacctatgaa caaaattacc
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tgactcttgt cccaggaaag ctgtttcgca ttttcgcttt ttgattggta ttatccagtt
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ctatgtagtt catattattg ttctgtctga ctctcagaaa ttacttcttc acgccagtgt
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cttgttgcat gactttgatg tcacctatag gaatacacct cactgcacgt aagtgggtat
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cttactgtat aaaaggtcta catggcttta ggttttagga caaatgtgta gatttataga
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ccatttctgt tggccaggac acagattttg agagctgtgt gtatatatat ataatcatgt
                                                                      900
ttgtattttt ttcctgaaag ttatcaattg cttttgttta aaacagtttg ttttagaggt
                                                                      960
ggggtgggga tgtatataac gaggaaaagt tatatgtact ttaaagtatg tcaagttctt
                                                                     1020
actagtttcc tgtactgaag gttcaatttt ttttatataa gtttactttt cacctgctct
                                                                     1080
                                                                     1140
attotttgtg gggaaaaaat gcatctagaa aaacatagtt taaatactgt atataagata
atgaaagtta gtaatgtcca ttatttaata aagtttgtaa agtacaaggt aaaaaanaaa
                                                                     1200
                                                                     1220
aaaaaaanna aaaaaaaaqq
<210> 50
<211> 1048
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<212> DNA <213> Homo sapiens

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-220×
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<222> (13)..(13)
<223> n equals a,t,q, or c
<220>
<221> misc feature
<222> (16)..(17)
<223> n equals a,t,g, or c
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                                                                      120
cagcagggac catagctctc agtcagaaga agaagttgta gaaggagaga aggaagtcga
                                                                      180
qqctttgaag aaaagtgcgg actgggtatc agactggtcc agtagacccg aaaacattcc
                                                                      240
acccaaggag ttccacttca gacaccctaa acgttctgtg tctttaagca tgaggaaaag
                                                                      300
tggagccatg aagaaagggg gtattttctc cgcagaattt ctgaaggtgt tcattccatc
                                                                      360
                                                                      420
totottoott totoatgttt tggotttggg gotaggoatc tatattggaa agogactgag
                                                                      480
cacaccetet gecageacet actgagggaa aggaaaagee cetggaaatg egtgtgacet
gtgaagtggt gtattgtcac agtagcttat ttgaacttga gaccattgta agcatgaccc
                                                                      540
                                                                      600
aacctaccac cetgttttta catatccaat tccagtaact etcaaattca atattttatt
caaactctgt tgaggcattt tactaacctt ataccctttt tggcctgaag acattttaga
                                                                      660
atttectaac agagtttact gttgtttaga aatttgcaag ggettetttt cegcaaatge
                                                                      720
                                                                      780
caccagcaga ttataatttt gtcagcaatg ctattatctc taattagtgc caccagacta
gacetgtate atteatggta taaattttae tettgeaaca taaetaecat etetetetta
                                                                      840
aaacgagatc aggttagcaa atgatgtaaa agaagcttta ttgtctagtt gttttttttc
                                                                      900
                                                                      960
ccccaagaca aaggcaagtt tccctaagtt tgagttgata gttattaaaa agaaaacaaa
acaaaaaaaa aaggcaaggc acaacaaaaa aatatcctgg gcaataaaaa aaatatttta
                                                                     1020
                                                                     1048
aaccaaaaaa aaaaaaaaaa aagggggt
<210> 51
<211> 968
<212> DNA
<213> Homo sapiens
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gtggaatcat atgcattctg gcgaccatca ctacggactc tgacctttga agatatccct
                                                                      180
ggaatteeca agcaaggcaa tgcaagttee tecacettge tecaagtact gggaatggeg
                                                                      240
ttoetgecac teacceteac ettttgtetg geteetettg etceteteet geetteeate
                                                                      300
tggggcccaa caccagccag ctgtgtagtc tggcccctgc tgactattct gcctgtgccc
                                                                      360
geteaggeet cacceteaac egatacagea catetttgge agagacetae aacaggetea
                                                                      420
                                                                      480
ccaaccagge tggtgagace tttgccccge ccaggactee etectatgtg ggegtgagea
                                                                      540
gcagcacctc cgtgaacatg tccatgggtg gcactgatgg ggacaccttc agctgcccam
agaccagett atecatgeag atttegggaa tgteeceeca getecagtat ateatgeeat
                                                                      600
                                                                      660
caccetecag caatgeette gecactaace agacecatea gggtteetat aataetttta
gattacacag cccctgtgca ctatatggat ataacttctc cacatcyccc aaactggctg
                                                                      720
                                                                      780
ccaqtcctga gaaaattgtt tcttcccaag gaagtttctt ggggtcctca ccgagtggga
                                                                      840
ccatgacgga tcggcagatg ttgccccctg tggaaggagt gcacctgctt agcatggggg
tcagcagagt ttctttgact ctaggaccct aggaagctta actctgtcat catctcaagt
                                                                      900
                                                                      960
atotgcacat atggtotgat gaagcottta aagttaaatg aacatttggg atotgtotaa
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acatattt
<210> 52
<211> 586
<212> DNA
<213> Homo sapiens
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<400> 52

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attttcttac tctttaaagt atttgtgggg ataatccttc attatttgat tggcaaaaat
                                                                  180
atatatgttt atagtgtgta acatggtgat tggatatatg tacacattgt ggaacagcta
                                                                  240
aatcaagcta ataacaaatc agttacctca catacttatt ttgtggtgaa aacatgtaaa
                                                                  300
atccactctc ttagcaattt tcaagcatcc aatacattgt tawtaactgt agtcaccatg
                                                                  360
ttatacaata gatctcttga acttattctt cctgtctaac taaaattttg tattccttga
                                                                  420
                                                                  480
tcaacatcta cccaatccct cactgttctc cagcctkgat aactaccatt ctactctctg
cttctatgaa tttgactttt ttttttttta gattccacat atgtgagatc gcgcagtatt
                                                                  540
                                                                  586
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<210> 53
<211> 751
<212> DNA
<213> Homo sapiens
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                                                                  120
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aagagctagc gaggcggctg gtaccgggtg atgetteacc acggetttee agaaagcget
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                                                                  240
cegtgacccc aggeccaccc tteccgacac tcacggttec ctcagaaatg ctcctctcaa
atototoact ctccctgcag cotttgttgt ttcttttttc tttcttctc ttttgcaaga
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tgggatcaag gaaaggtctc agacacaaaa cgcaacattt ttcttccatg acagatcaga
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tattgaaggg ctcagtgagg agccctgctc tgggacaact ccatgattag cgctccaaga
                                                                  420
ggcagtcaca gggaagcagg tgctctgttc ccctcctggc tcagcaatcc cgcagtcctc
                                                                  480
cogtocoget ccaggeccag ccagcotggc tgettggate cgagacaata gettggtetg
                                                                  540
gaggeggete agggtgggag ggacccaggg accegggeac cagtacagca getgggaatt
                                                                  600
caggcccagg gatagggatg gggcacagga caccacccc atctcacaca gggagatgaa
                                                                  660
ggtgggatcc agcatgggga ctggacatcc ctgagtccag ctgccccgtt acaatggggg
                                                                  720
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aactgagatc cggggatggg atagttctcg a
<210> 54
<211> 477
<212> DNA
<213> Homo sapiens
<400> 54
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                                                                   120
180
ttggccatgc ctttttgagt ttaccttttt atattttgtc catcattgcc atgtgtttgg
                                                                   240
                                                                   300
agcagtgggc gttccataac atgaactcac tgtaccatca cgaatgggaa gtaaggggaa
                                                                   360
accttatcca tgtggatttt actcttccct gattccctaa attgggtttg caaaatacta
ctgtgcactt tcttgatgat tcgggcttat ctttatgact gtctgtkttt gtgtcagact
                                                                   420
                                                                   477
<210> 55
<211> 1153
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (409) .. (409)
<223> n equals a,t,g, or c
-220×
<221> misc_feature
<222> (511)..(511)
<223> n equals a,t,g, or c
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60

120

180 240

300 360

420

480

540 600

660

720

780 840

900

960

1020

1080

1140 1153

```
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<221> misc feature
<222> (1001) .. (1001)
<223> n equals a,t,q, or c
<220>
<221> misc feature
<222> (1089) .. (1089)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1113) .. (1113)
<223> n equals a,t,g, or c
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aggtaacatt agettetata ataegcacae teecaaatet cagtatttea acatgagttt
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<210> 56
<211> 1241
<212> DNA
<213> Homo sapiens
<220 S
<221> misc feature
<222> (8)..(8)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (59) .. (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)..(78)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (84) .. (84)
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<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (86)..(86)
<223> n equals a,t,q, or c
<220>
<221> misc feature
<222> (104)..(104)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)..(128)
<223> n equals a,t,g, or C
<400> 56
                                                                     60
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tgggaacnga acctgggeta ccccctgget atgctgtgct tgctggtgct gacsggcctg
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tytgtgctca ttgtgggcat ccacatcctg gagctgctca tcgatgaggc tgccatgccc
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cgaggcatgc agggtacctc cttaggccag gtctccttct ccaagctggg ctcctttgcc
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tettcagcet ceetttetge aagatagggg caagggegge tagatggatg tgtetgetgg
                                                                    360
gcaagtcata taacatttct gatectcagt ttcatectac aaaatgggeg taacaatgte
                                                                    420
tacctactcc attgtgtgga ccaaaggaga tggttaatgt gaaagccctt tgtgaacctg
                                                                    480
540
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                                                                    600
                                                                    660
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tgtattctct tcacctggga ccactgattt ttaagctgcc acattggctg gagaacaggc
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ggcagggatg gggcagggag cacatygtaa tactaacggc ctcagagmtg ccccctgatg
                                                                    1140
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tectectgee tgttaccceg tgcctctgtc tcttaacagt gggatgatga agatgccacc
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<213> Homo sapiens
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ccttqttacc tagaactctt atgtttcagc ctaatttctt catctgcaaa gacctaatag
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caaaaactta gaaggtaaac aaaaagtaat ctcataaaac atagaagggg aatacacctt
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ggtttcagat atgcacagaa agtatgtaag ctgtacccca gaagcatcct tataaatttt
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gcagtcagtt tetetgacet ttetttacae aggagggatt tgttgtayea atetttaate
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                                                                     600
tgatgcatct tacttagaaa tgaaaatata acaaaacaag tcatgttaaa caaggaaaga
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tatggatett taateaegaa eecaaaeeaa gttggtgget gaacagagaa gaactgtggg
                                                                     720
agccaggcca gttggcatga cagtatgtgt tcagctggtg tggagtaagc ccctggactg
                                                                     780
agggtgttca gtgtggcttc agccagggga ttcagtggtg aagaaccctc ttgctactgt
                                                                     840
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aaactcqa
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<210> 58
<211> 849
<212> DNA
<213> Homo sapiens
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gtgaaaactg tetttteett gatactaeet ttagatteat atttgggaag acetteaeta
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atagtaatgt ctaagccatc tggaattagt ttgttgatta tgcaagaaag ggatcgaagt
                                                                    360
getttttetg agteattate cacatgeega aacatttatt gaatageeet tteettattg
                                                                    420
atotgaaaac accttottat aaaaccttgc attggttttt ggacttgctg tgctttcagg
                                                                    480
agtcagaaga acattetttt gattatkgta getttacatw aataatacat ttkggeeggg
                                                                    540
                                                                    600
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aggtcagggg ttcaagacca gactggccaa catggcaaaa ccccgtctct acaaaaaaa
                                                                    660
aaaaaaaaa aattagctgg gcatggtggt gcctgcctga aatcccagct actttgggag
                                                                    720
                                                                    780
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caatgccaca catttgcttg cttctgctga atgccttagt agtttcatgt ttattgctgg
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ccaagtggca ttggctctag ttactacctg atattccagg gtggtagctg gagtggtctc
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aagggtccaa gctgacctca cttacaagct gggtgccttg gcagggacag ttaggaggct
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gtgtgtagca gagcctcact cggtctttgt attctccagg cctcttcagt ggtttctttg
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gcacttotta aatgatgtca gggttccagg agttaatgtt ccaagagaca ggaagtggat
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getgeccate tettttttt tgtttgtttg tttgtttgtt tttttgagat ggagtettae
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<210> 60
<211> 857
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (493)..(493)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (562)..(562)
<223> n equals a,t,g, or c
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ctaaaccgca tottactggt attatgctat cagcotgtat tgagagactt tataggtaaa
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gtocaattta ggotgtttgg tattatotat taaaattaga atgttcatgc totgtaacct
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actgatttgc atgtgtcttt ctcttttatg gcttgaagag gagagaaatt tgtgcttagc
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totgaaggot aaagaagaga gnacaaagaa agottgoatt gggaggotga ggtgggagga
                                                                    600
                                                                    660
toacttgage ttaggagttt gagaccagec tgggcaacat agggagactg cacetetata
agaaatttta aaaattagcc gggttggcag cgtgctcttg tggtcccagc cgcttgaaaa
                                                                    720
                                                                    780
gctgaggtgg gagaatcgcg tgagcctggg aggtcgaggc tgcagtgcac cgtgattatg
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<212> DNA
<213> Homo sapiens
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qqqtqtqcat taaqaqtaca ttgacctqtc tqtctccaqt cttgactctt ttggaaqaqa
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ggacatgctg tgtgtatgac acacttacag atgtctgtgc tcactgatgc ttgttgatgt
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tgaaggaaaa aggacatcag tgcttggatc ttagctctta taagcctcac gtgcaacaat
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aaacccgagt tcaagaatca gattcttaga tagattggtt tggtagcaaa tgacaaaaaa
                                                                    720
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<212> DNA
<213> Homo sapiens
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catccagaga gtgaggttag gaaataaaaa gtatataaat attagatgcc tagaaatgca
                                                                     180
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tgtaatgggt ccttcccaga gagaggtgac tgtccagtgg caccgggccc ttttcctcct
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                                                                     360
teccetttta etettateaa etaggacaga aactaagaat titggettea agtggetaaa
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gttacaagtc caagaaaaaa gacagaaact tttaagtatt gagccaaaac caggtctagc
                                                                     480
aamcataatg ctggccctag attatttatt aatttatgaa gaaacttcta gatatggggg
                                                                     540
tgacaaaagg aaattaaatc cattatatat gcatatattt taatgtaaat atataataga
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taaattatgt atacataata tataaccaaa ttgaaacagt tttacaattt ggtttgactg
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<210> 63
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<220>
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<222> (932)..(932)
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<211> 944 <212> DNA <213> Homo sapiens

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<221> misc feature
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (944)..(944)
<223> n equals a,t,g, or c
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gagagatcag tagcatttga ggaagtaaga gaaaagaatc atggtacctc agggtttctt
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tecetttact egetggeage cattgtetgt gggeacetea tgttttteca caetetactg
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ggccgtggag gtaacgatca cccaggccag tctcctctgc ctgggatgcg ccctctgaga
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ctcctttaaa gtgtccgggt gcagctcagg ttgagtggag gtagaaggag aaacagacat
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gtgtgtctct gatttaacgg attcactgtt ttctctgcta attgagagag cgttatttac
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aaggtaataa aaccetteea acgtaattgg teagataaaa ettttttet tgtatgetta
                                                                    720
aataaagcaa ttagtgaagc acttctatcc aaaatgactt ttttgtcctt ttttaaaaacc
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aatttactgt tactggaaac tttttgtaca ataawgcaat cacgcagatt aaagaaaaaa
                                                                    840
aaaaaaaaaa aaaaaaaaaa aagggcggcc gctctagagg atccaagctt acgtacgcgt
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                                                                    944
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<213> Homo sapiens
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ctqtaacttc aagcaagcta caagaatcta tactagggtt cagacctttg aggctgacag
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cgagetttga gtttgatgac agtacctaaa atatattaag tgtactcagg aactggccaa
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tgctcaatag acgactttta ctcctcgtca atggtcgcat aactgtctct ttttagacac
ttatgaaatt gtetgaactt ceteetetae tteteeaact eecagaagag tgaaggtaac
                                                                    420
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                                                                    480
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tccaagaagt ccaaagagac gcccctcatc gcaaaggaag tgctaccgtg ctgcctcgat
gtcccccttg ggtgccatcc ctgaaacatc gaacctccca tacctcttct ccagccgtcc
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contratect egitecoege etaccetete ticaactica ticaticate caacattege
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tqqqqqattt ctacattqac acgccccgga cagaagcctg gggtaaagat gatcaggaac
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<210> 65
<211> 442
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
 <222> (306)..(306)
<223> n equals a,t,g, or c
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                                                                    120
cttattctaa aaataattca aggtgaccat gcttccatta tacttcttgc aaccatacct
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atctttggtg atatttatta tgttaaggga caattggcat cttttggccc ttacctgtag
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ctattctatc atctggagat tatctccaga cacaaatcca tcgcccattg ctccatcgag
gcacantcag ctckttgtag ttgccattgc ccctctcgag ccttctccac atagccacat
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qcaatccatt cccaaaaacc tagetcaatt tteetcatca cagatgtttt ccctgaccct
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ccagttggta tatatctcct cc
<210> 66
<211> 833
<212> DNA
<213> Homo sapiens
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                                                                    120
aaactgtaag aggcacagat gactccacca gctgcagagt gactctgaag agagtcttca
                                                                    180
                                                                    240
cttactgcac aggcaaagaa aggcacagga atatttecta ectetecete etgtgagtee
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cacctcccc caccccatc tccaggaggc aggtagagca gttctraccg agaggataga
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getagaggca getgeettgg aagggaagtm aggeteactt ggacageeca ggecatggca
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ggaagaatcc cttcctcttg gggtccttga tgggcatgtg tgatggggaa ggagcagtct
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cccagecetg ggtctgctcc ccacatetet cctaattcca ettcacettt tgccacecec
                                                                    660
                                                                    720
tecceaccag aggestages ettttgtsac cgaaggeses cagagtgttt etgtgtgaaa
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833
<210> 67
<211> 1262
<212> DNA
<213> Homo sapiens
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<222> (621)..(621)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (641)..(641)
<223> n equals a,t,g, or c
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<221> misc_feature
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 <223> n equals a,t,g, or c
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 <221> misc_feature
 <222> (730)..(730)
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<223> n equals a,t,g, or c

<213> Homo sapiens

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<221> misc feature
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catacaaaaa ggattaaatt taaattcatt catgtttaga cttgagttat tacattttta
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aaactatcat cttgccttta atgtttgtgg tcctacacaa actattagta catttcagta
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caagcatcct tacatttttt ntttaattaa aacagcctgt ntagggettg ggattcccta
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tnngangaan tgttcttttg cagtcagaaa acactcacaa aaagacaaaa aaagttccac
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agtattatat ttcatgtcag ttcaggccta aaatcctttg caaataagat gtttataggc
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catattaggt cttgtcttga ggacccttta tatgtgcttg tttactagtg gccttccagc
                                                                     1080
catagoatto ttaccttttt ttoctattot aagaattaaa aaaaaaaatt atagagocag
                                                                     1140
caagggagga ggcaggaaac agaaatcgaa tttcatcatt ccagtatagt tgtccctttt
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                                                                      1262
na
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<211> 921
<212> DNA
<213> Homo sapiens
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 aaaaaaaaa aaaaaaaaaa a
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 <212> DNA
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gctcctggat gaaggctctt gtaggtaact ctcctccagt cggtgattca gggacccagc
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ctccttctgc cttgcggctt tgccttttaa aggtcctcag ggtgctctcc atgtatcttg
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ccaatgggga acgagtgtgg aggactcaca agcgggtcyc acatcacgtc ctccggggct
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aatacacate cetteteece acactetgtt ggteagaagt caetgettgg egecetge
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<211> 719
<212> DNA
<213> Homo sapiens
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719
<210> 71
<211> 519
<212> DNA
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<221> misc feature
<222> (13)..(13)
<223> n equals a,t,g, or c
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 <222> (24) .. (24)
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 gggcaatttt ctattagtgt ttcttatttt ggccagttct tttatttatg tccttgtgac
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 ccaggtactt ggggggccag ctacccttct ggccttttag cgtctttgaa ggagaccaga
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```

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catgagtgaa tacctaggag agtgtcagca tgtttctgga aaattggcag agaccaagcc
                                                                 360
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ctgctgcaga ttcgtcaggc caggtgaaag ggccaggcag ttgcagctga tgatgtaaat
480
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aaarwaaaaa aaaactcgag ggggggcccg gtacccaat
<210> 72
<211> 826
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (726) ... (726)
<223> n equals a,t,g, or c
<400> 72
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ggaccttgcc acactgctgc agccttccag taggatatgg gggaatgtca gtgaggctcc
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agggatgtag atatgtaggg aatgttggac cccagggcaa catgcaatct ggtaggagtt
                                                                 240
gggctctcaa aatggtgctg ctgtgtaaca gctgcttggg tcttggggta gggagtgtag
                                                                 300
                                                                 360
gacccagcat gagetecete tttggageag tgetgtetga gactccagge ageteegtgt
attagtetea ggacetgeaa aggeetaggg getetttttg ggtaggaetg caggagtete
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catggtggga atgtgaacca ctggaaatct ctcatttacc atttccctgt actggagatg
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gcataaggca ttttctgtca cttctctgct gaactctagt gttctttctt agaggctgta
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                                                                 720
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aagacnacat gcatgaccag gcagatactt tgagcagagt cataggaact gctaaaaaaa
                                                                 780
                                                                 826
<210> 73
<211> 911
<212> DNA
<213> Homo sapiens
<400> 73
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                                                                 120
toggtgaaag orggtttoga ogottaggag ggoogaggga gaagattoca coagcattgt
                                                                 180
cettgettea agttttagga tgtetgaact tteagettte atgtttteaa ceateatttt
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cattccgctg cctccatcat gtaatagaat cgcttccaga aaggcagtta actggaagca
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gcagaggete ccagecgtga gaggactget caacaatgee ecceategee geececcae
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ccctcgcacc ccttgtgttt tcccctctga ggggcccaag ggttatggct ttcatgtcta
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ggtgtgggga cagaggaggg agaggcagat ccygggccgg gagaggatgg ccctggtctg
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agatetgatg atgetgetat ttacaaaaca etgategtee gaaagettga atetgtteet
                                                                  720
cctcgaatga ccctgtagat gcctgacctc caccgtacct ccacatcact attcatgtcc
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 ttctaggaaa atgtgcacat gcctcacgca ctatgtggga agggcgtgtt tttaaattaa
                                                                  840
 900
                                                                  911
 aaaactcqta q
 <210> 74
 <211> 722
 <212> DNA
 <213> Homo sapiens
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 <221> misc_feature
```

```
<222> (2) .. (2)
<223> n equals a,t,g, or c
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cataaagtgg tcaccaacaa gggcacttct gaggtgctaa tgatgttctg ttttctgatc
tgggtcgtgg tgacattcac atattcatta aattgtacat ttgttttaca taagtttatt
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atatttccta attttaaaaa agttaaaagg aggaggaaaa agttggttat gaaagtgtaa
                                                                      240
ccattettee aaaatateaa ttaaaacaea tetgaattaa gaggtaaaat atateaaaga
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                                                                      360
ttgacagaaa acaaaagctc tgaaatgata tttccagcct aagaacagtc gttgcttttg
                                                                      420
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ccaggagcag aggcccacac ctgtaatccc agcactttgg gaggccgarg tgggtggatc
                                                                      480
acaaggtcag gagatcgaga ccatcctggt taacgtggtg aaaccccatc tctacaaaaa
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tacaaaaaat tagctgggct tagcggtggg catctgtagc cccagctact cgggagattg
                                                                      600
aggcaggaga atggcatgaa cctgggaggt agagcttgca gtgagccgag attgcgccac
tgtaccagec taggtgacag agegagaete egteteaaaa aaaaaaaaa aaaaaaacte
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                                                                      722
<210> 75
<211> 845
<212> DNA
<213> Homo sapiens
<400> 75
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                                                                      120
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cetttacett gtagtacaag gtgetttaat gggatagaac taagcatate aatatetata
                                                                      180
actgcatttt gtgctagaca attactgttc ttttctctaa aatgtatatg tcaatttaca
                                                                      240
aggccaggga tagaaaacac tocataattg ctttccttga ttttgctgag gatttggtat
                                                                      300
                                                                      360
gattttagta agcaaactgt tttttggttt ttccttaatg tttttaattt tttttcctct
tgcaacaatg acggtgcatg ttcttataaa tataggaagg tccagatata aatagtaacc
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taaagttott gotgtgotta aaaaaaaaaa toatgtggoo otttoaatat ttgaactgot
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aagcaatgac atctgtagtt ttatctcctt ttttatgtca tagaaattaa tatgatactt
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                                                                       845
ctcga
<210> 76
<211> 882
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (881) .. (881)
<223> n equals a,t,g, or c
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gggctgagaa aggggcaggc aaaatgaagc tggccactga aaactgtaag atggtcaaaa
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 gctgacagcc tgtgtatgtg aaaagggaat tgtaaatgga ctgcaatgta atgtacactg
                                                                       240
 taatttgaat acaattactg tatctaaaag gagctgctat gaagtacctt tcttatgttg
                                                                       300
 ctaggctact gtttctgaaa gccctggatc tctttgcacc aaaaatggtc cagatagact
                                                                       360
ctttttaagg atcttggctg ctttttacta gaaggttgct tttatgagca tatttatact
                                                                       420
 gctgaaggat gagtgttaat tttaattaac tttgccgttt tgtagagaaa actattccac
                                                                       480
 aagataaatt ccaagtcttt tcacctgtca ggcatgcata ttttaatatc tgtttggata
                                                                       540
 gtcagaagta gaatcataaa ggtaaaatat gagttgttac tttgtttctt cgatgtcata
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ttttatgtgt aatatatatg taaagggcca ttcttaagtt ctctccttaa acttaatgct
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                                                                      720
totatgtaac ttattcactc tgtaaataca tttaaagttt ttgtgatgta agottaattg
                                                                      780
                                                                      840
atattctgtt cagaacttty tttagwctaa araaagttct gaacagaata tcaattaagc
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<210> 77
<211> 1590
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> (1374)..(1374)
<223> n equals a,t,g, or c
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<221> misc_feature
<222> (1397) .. (1397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1516) .. (1516)
<223> n equals a,t,g, or c
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catccacctg ggaacagatc aagaagctgt cacagatggt gggagaaaac ctgaggaaag
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cgggacaacc agtcacaatg agtaatttaa tggtagctat gatagcagtg atcaccattg
                                                                      240
                                                                      300
cogtgagtat toottcaaca agggctgaca cagagatcag ttatacttat tgggcatatt
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                                                                      420
caaaaatcta tttgtaaaca aaattgaacc tggccagaaa aaatgaatgt acttttttag
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gaaggttgca ttgcagaaca ggcagaggtg ctgcacaacg attcctatgg aatcattatt
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gattggtccc ctaaggggat gtttagcttg aattgcacct cttagtctgc atgtcacagc
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                                                                      660
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                                                                     1080
aagetgeett ggettttat egetttgeaa aacaagagaa tggggacaag ttgggaacag
                                                                     1140
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agggcaagga acaactggcc cactcagggc ggataaccac ttaaggcatt cttaaaccac
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                                                                     1380
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gageceatee etttaenteg geceateeet ttattteeea taaggaatae ttatagttaa
                                                                     1440
tctatagaaa caatgettat cactggettg etgteaataa atatgtgggt aaatetetgt
                                                                     1500
tcaaggetet cagetntgaa ggetgtgaga eeeetgattt eeeactecae aatetaaaaa
                                                                     1560
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aaaaataaaa acaaaaaaaa aaaaaaaaaa
<210> 78
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<210> 78
<211> 1373
<212> DNA
<213> Homo sapiens
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aacatctaca aaagccccta cagccaatgt aacacataat agtaaaagac taattgcttt
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totocaatat cagggatatt agggacagag atgtotgtoc toaccactot tattoaacat
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attgctggaa gttctgtcta gtgcagtgag gaaagaaaag gaattaaaaa gcatgcagac
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aaaaagaagg aaacaaaact gtototattt gcaaatgaca tgattotota aataaaaaat
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cccaaggaat ctacaaaaaa aactagagct aggtggggtg tggtggctca tgcctgtaat
                                                                    420
cccagcactt tgggaggetg aattaagagg attacctaaa ccaagaagtt caagaccage
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ctgcgcaaca tagtaagacc cccatctcta caaaaaattg aaaaattagc tggatgtatt
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gatecatgat cacateacea tactecagee tgggcaaceg agtgagacet gteettaaaa
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                                                                   1200
gacacaaggt caatgaaaca gaatagagaa cccagacata gacccacaca agtaccacca
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1373
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<212> DNA
<213> Homo sapiens
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ggtttctcta atggttcatt ttcctttagc ttgtgaaaat tagggcagtt tgtccagagc
                                                                     240
ettactegea ggagacacca gacccaacce atgettagat ttetgttaat aaaagggaga
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                                                                     360
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taaagtgcct accatgatta tgtgctgtag aaaagacaag gacatttact aggggggatt
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qtqqqccaa tcggcatcat aagcatgttc tgaaagccaa agacaataat cacatccaac
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gcagagaatt ggttttattg ttgatctgtg gatttaatga tttctaggtg aaaaggacgt
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ttaagtgtac aatttctttt cttaatttaa tatatttatg taaatgcatg cctgaaattt
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ggttagattg gctgtgtttt gtgtctttta acatgatcaa atgattaaac tttatgctta
                                                                    1080
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tgacttgaaa aaaaaaaaa aaaaaaa
<210> 80
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<211> 1129
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1053)..(1053)
<223> n equals a,t,g, or c
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ctcaggtcag gtatgtcccc aggaagggtc tcagtggttt ctttgcaggg atcacagcta
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                                                                     360
caatttcaac tgtaaaatcc taatcacaag tggcaactag ataggttaaa atgatttctg
gaactttcct tetggacatg taagateeta aaatettaeg agaattteag tgagttgatt
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ttgtctttaa tattttttct taggaaaaag aagacccatt ttgaatctgt tcaactgaaa
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acctcaagat ccccaaatat atgaagagac agtgctgtag cccttgagac taatgaacaa
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agaaacctgc tctagtttta caggaccata ttttagggtc tgtcctcata cctgtcacat
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tgccttatca catggtcaag taccttgcca aataaaggaa agcaaatgat ttgggtctca
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aagtttaagc ccaccaatgc actgctgatg catgccatat aattaatggg taactttgat
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totttatgac gtotacataa caagtgtgat ttggaaggca catgtgagca tatgcattat
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gatccaattt atgttttttc tttgtttata ttttggggaa aattaaaatt tttttaaggt
                                                                     960
                                                                    1020
atatttttcc cattatttat tttcctgacc ttaaaacagc ttttctacta aaaaatggtg
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agcaatgaag acaataaatt tttcattttt ccnaaaaaaa aaaaaaaaa aaaaaaaaa
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<210> 81
<211> 1987
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (1554)..(1554)
<223> n equals a,t,g, or c
<400> 81
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agtgcaccca gttagacttg gagcggaaac tcaagttgaa tgaaaatgcc atctccaggc
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tccaggctaa ccaaaagtct gttctggtgt cggtgtcaga ggtcaaagca gtggctgaaa
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tgcagtttgg ggaacteett getgetgtga ggaaggeeca ggccaatgtg atgetettet
                                                                     300
                                                                     360
takakgagaa ggagcaagct gcgctgagcc aggccaacgg tatcaaggcc cacctggagt
acaagagtgc cgagatggag aagagtaagc aggagctgga gacgatggcg gccatcagca
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ctagtgttta catagggctg aaggataaac tctcgggcat ccgcaaagtt atcacggaat
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cttccaaacc tgagcccagc accagggaac agttcctcca atatgtgyat gacatcacgt
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tegaceegga cacageacae aagtatetee ggetgeagga ggagaacege aaggteacea
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 gggcaggcac ctatgttggc ctgacctgca aaggcatcga ccrgaaaggg gaggagcgca
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                                                                     1140
                                                                     1200
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 caagaaggaa aacgccatcc ggattgtaga tctgggagag gaacccgaga agccagcacc
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 gtccttggtg gggactgctc cctagactcc aggagccata tcccagacct ttgccagcta
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 ggettttgaa ateetatggg gtetetgaat gaaaacatte teeagetget etettttget
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                                                                     1500
 acggagtete geactgttge ceaggetgga gtgcagtgge gegaatettg getneactge
                                                                     1560
                                                                     1620
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 ttacaggtgc ctgccaccac acccagctaa cgttttgtat ttttagtaga gatggggttt
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 caccatgttg gccaggcaga tctcaaactt ctgacctcgt gatgcactca cctcggcctc
                                                                     1740
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ggcaccaaat ctccctcatc ttctagtgcc attctcctct ctgttcaggt aaatgtcaca
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1980
                                                                   1987
aaaaaaa
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<211> 2053
<212> DNA
<213> Homo sapiens
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ttccagaget tctcggatge cctaatcgac gaggaccccc aggeggegtt agargagetg
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actaaggett tggaacagaa accagatgat gcacagtatt attgtcaaag agettattgt
                                                                    240
cacattette ttgggaatta etgtgttget gttgetgatg caaagaagte tetagaacte
                                                                    300
                                                                    360
aatccaaata attccactgc tatgctgaga aaaggaatat gtgaatacca tgaaaaaaac
tatgctgctg ccctagaaac ttttacagaa ggacaaaaat tagatagtgc agatgctaat
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tgagacaaga ctcaggatga gctgtctgat atttaaatat taagcaattc catttaaqtg
                                                                    600
                                                                    660
ctggttcctc taggcactga aataaaatca ttttttgata aatatagaag tttccagtca
                                                                    720
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ttaatatggt catgatgatc atttatcttt tccgttacta aaaccttatt gcatttattt
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                                                                   1080
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agatggttct gatgaagtga aacgtgccat gaacaaatcc tttatggagt cgggtggtac
                                                                   1920
agttttgagt accaactggt ctgatgtagg taaaaggaaa gttgaaatca atcctcctga
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                                                                    2040
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```

2053

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<212> DNA
<213> Homo sapiens
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<221> misc_feature
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<223> n equals a,t,g, or c

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gaccaccagg gcatctctgg gctggatgag ctcccacaag cctgagggaa aggccagcac
                                                                    180
tegetageag tggeaggeag aggeeeagge tgeegteece tagagteeca ggttggetet
                                                                    240
gccagtgcct gtcctttacc aaagatgaat gaagcaaatg tcatgctgcc ttattcaggg
                                                                    300
aaggaggage etgteetgee tgtggeeatg accetgeete teecaggeag gggeeegega
                                                                    360
tgtggaactg ctgccactga ggggggatcc agttttgtca atgcagttgt ctctgtttta
                                                                    420
                                                                    480
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tggctctgag tacccctgct ttgggcttgg gcctaggctg cattgaaaag agctgaaggt
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                                                                    600
                                                                    660
cgacacggts ggggcatctg gcctggccag tgccctgatc ccagagagcc cgaggaggtg
teteaggetg cetgagtegt gacetgetag gecagagece actecatetg gtagaaggga
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aagcccatat gctaccacca gctgtgtcca aaaccgccag ctctgttctt cctcagccag
cctcgcccat ccccttgagg tctcagcccc tttcccttgt agctcctccc ctggaggggg
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aatggcagca ggggttgggg aaacagcatc tccaagcagc ttagagttgg ccatatttac
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960
gageteetee eteteaacae ecagttteet tgggagttgt cattaaagga aaaaaaaaaa
                                                                   1020
                                                                   1080
aaaaaaaaag ccagtgccca gggatgggca tctccaggga gctggggatt agtgccaggn
agecetgeca gecatgecta catececatg ggeacagaac aagecaaage ettegttgta
                                                                   1140
                                                                   1193
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<211> 541
<212> DNA
<213> Homo sapiens
<400> 84
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                                                                    120
aaggtgtttt tgtctttgag aaaggcaagg atgaagggca agatttgagc catggtggta
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gatcagaaag aagatctgat aacaggctta gggatcaaaa tggtaaggaa atggcttcag
                                                                    240
gggagtcagg cctggcccct ggagagggag gagagggaag ggctaggctc tttatgtaca
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tgctgtccat ggggcctggt aagattcmtg gaatcactaa cccatttcac aggtgaggca
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attgagcctc tcagagctga agtaactgac ccaaagcatc cgtgctcttg tgtggcagag
                                                                    420
                                                                    480
ccagaagtca aatccaggtc tctgtgamct caaggggcac caaartgagt atcaaaaagg
cagaaaggga cttatccctt cactcactca gcaaaagcat agtaagcagg tggcgtgcct
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<210> 85
<211> 985
<212> DNA
<213> Homo sapiens
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<222> (633)..(633)
<223> n equals a,t,g, or c
<220>
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<222> (642)..(642)
<223> n equals a,t,g, or c
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 gtatcattga gcttcatttt acagaaccag catgttgtcc ttagacttcc ctctgatcct
                                                                     180
                                                                     240
 tttaggtctc aacttacata ttgccctctt gagccttcta gttcccagac tgagttagga
 accccaaccc atgetggact cagttagtcc tttccacatt gtgctgtaat tggctatacc
                                                                     300
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ccatctgtcc ttcctgccag actaggagtc tcctgcgggc cctaacgttc ccaatttccg
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                                                                      420
aaacaaataa gaatcatata gtattagcag cactagataa aaggtgtaaa atcttaagtg
                                                                      480
atccaccatc ttttaaataa ttcattcaaa cgatatttca aatgcatatc acctccaaga
                                                                      540
aatcgtttct gcatttcrrs tgasttctac gatgccwwrt gaatgarraa rsrrgracak
                                                                      600
ggyrtggttc tggggggctg tgagagtaac ggngcaatcc tngtcattgt cgtagttatc
                                                                      660
tggccatcca gggcttctca ggttgccaaa tgccttgtga tagtctctgt tgcaatctta
                                                                      720
gaggaaaaat aggcataatt aatgtacgca ttccaatatt tagtgctctt tcaacttaca
                                                                      780
caggaatcat tcaaaaagat cattgcattt gataaacttt agaaaaaagt aatccagctt
                                                                      840
                                                                      900
cttcgtttac ctttgagata attgagaccc tgagcagtga agtgaattgc tcaagcagca
                                                                      960
cacacaggtg caacgcaaca gctcgttcac acaaacacgc ctacaggaag catgacacag
                                                                      985
gaggettete etttaaagae gaata
<210> 86
<211> 889
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (117) .. (117)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (292)..(292)
<223> n equals a,t,g, or c
<220>
<221> misc_feature
<222> (341)..(341)
<223> n equals a,t,g, or c
<400> 86
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tgagggtgag aacgtggatt gattcttgat tgatagtggg gattccatta tctgtatttg
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gcagttatgg cctgctgcgg tgtatagaag cttctttcca ttcattttcc cgaattttca
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tactgctcaa ggaacagttg ggggggaatg ggcagaaggt tgggcacttg angtatttga
                                                                      300
gctatcggta ataactgact ttttagggcg cacagatttg nagtagagcc atggtagtag
                                                                      360
                                                                      420
ttagtaccaa tgggtttttg ctgcttctac tctttcttaa cagaaaaagt ggattgtgtt
catataggaa agcagttcac agactgtctt cctgcccctc ccgccaccaa gctggaccta
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gaatcaagtg tgactttaaa tggggaaagc tgtgttacag ttgtgcttaa gccactgctg
                                                                      540
tggcttaacc tcacctatgc ataagaattt gctcgtggct ggccgggcgc ggtggctcga
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                                                                      660
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 gaccatcgtg gctaacacgg tgaagccccg tctctactaa aaatacaaaa aaaattagcc
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 gggcgtggtg gcgggcgccg ctagtcccac tactgagtcc caggctgaag caggagaatg
                                                                      780
                                                                       840
 gtgtgaaccc aggaggcgga sttgcarcga gccgagatcc tgtcactgca ctccagcctg
                                                                       889
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 <210> 87
 <211> 558
 <212> DNA
 <213> Homo sapiens
 <400> 87
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 gtgcctcgtg cacatggact gtgcatgtgg attttgccta aggtcagcct tatatgcatt
                                                                       180
 gtggaactag ggtatggaaa accatgaaac atgattattt tettetagca tgeetgteta
                                                                       240
 tgacttcaac tggtggtatt ctttgtactt tataatctac attatcatta atacctacat
                                                                       300
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cttcaagtct gtctttctgg ccatggtgta cagcaattat aggaagcatt ttcacatact
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gtgtgtgtgt gtgtgtgtgt tttgtagtga tgaacagaac ttgttattta cccaattcta
                                                                    420
ttatctatca taatagtaaa ttagctacta taatagacaa aagtatgact ctcagttaaa
                                                                    480
540
                                                                    558
aaaaaaaaa gggcggcc
<210> 88
<211> 931
<212> DNA
<213 > Homo sapiens
<220>
<221> misc feature
<222> (930)..(930)
<223> n equals a,t,g, or c
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                                                                    120
getecatgca gaataggagg atatagaata ggaggagaag gtttetgetg tggcacetgg
                                                                    180
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geocceccc gagtgeetea gtgactgeag taaagtggee ettgteatgg teetetteet
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                                                                    360
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gccagggtct tagtaccatt tgctgctctt atctttcaag taagggagaa catctaagaa
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                                                                    480
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                                                                    840
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                                                                    900
                                                                    931
tggcatgcgc ctgtagtccc atctactcgn a
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<213> Homo sapiens
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gttctaaggg ctttgcatgg ttcactcact ccttacgtca tccctcggtg gcaggtgctg
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                                                                    300
gcacacatgg catctgcact gctcctgacc gaccgacaga gagagctgct gtcacgatcc
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atgaaagata aatctatgga cagagtaaac cctgactggc ttgaaattag ggcccttact
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cctccacact cctgacgggt tggttcaaga ccargaawta gaagcmcmtt gtgagttcta
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<210> 90
<211> 812
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<213> Homo sapiens
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<222> (443) .. (443)
<223> n equals a,t,g, or c
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aataactttc aaggaaagcc actgaataaa gtgccctgca ttcctgtcca ttggatactg
                                                                      180
ataatgotat aagatgatot ttotottott tattttgttt gagattattg tgactototg
                                                                      240
gctaactcct acttatcctc aggccttttc tgaactcaca attcaaatta cagctccctt
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tggttctctt ccacagcagt tgtacttaca tatgtctatt atataattat gaattgtttc
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atattgtcgc ccttacaggt aaactaatga atttggggct ccatctgttt gctcaccact
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<221> misc_feature
<222> (12)..(12)
<223> n equals a,t,g, or c
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<222> (565)..(565)
<223> n equals a,t,g, or c
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agaatgatgt gcagagtgtt aggaagacat ccgggctgct gagactcggg attagaagaa

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930

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		53			
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	62								
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                                                                   1740
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                                                                   1860
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1977
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ctttttcaaa ctgtccatgg gaaggctgaa ttgagtgact ccccagaatg aagatgagaa
                                                                     1080
ggtgaatata atcaatgcca atgtaatgcc agcgggtgar gatggccgat ggraggtttt
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caaaqatgta gctagcattt tggaaaccat atgggcaaaa cccgggcaac cagaggggg
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aacaggttaa gggaccgttt cccaggaaan tccccaantt ttt
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<222> (1438) .. (1438)
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ggtgteggtg gtegeageet tggegetgge ggtaetggee eeeggageag gggageagag
                                                                      180
geggagagea gecaaagege ecaatgtggt getggtegtg agegaeteet aegatggaag
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gttaacattt catccaggaa gtcaggtagt gaaacttcct tttatcaact ttatgaagac
                                                                      300
acgtgggact teetttetga atgectacae aaacteteea atttgttgee cateaegege
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ageaatgtgg agtggcctct tcactcactt aacagaatct tggaataatt ttaagggtct
                                                                      420
agatccaaat tatacaacat ggatggatgt catggagagg catggctacc gaacacaaaa
                                                                      480
atttgggaaa ctggactata cttcaggaca tcactccatt agtaatcgtg tggaagcgtg
                                                                      540
gacaagagat gttgctttct tactcagaca agaaggcagg cccatggtta atcttatccg
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taacaggact aaagtcagag tgatggaaag ggattggcag aatacagaca aagcagtaaa
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ctggttaaga aaggaagcaa ttaattacac tgaaccattt gttatttact tgggattaaa
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tttaccacac ccttaccctt caccatcttc tggagaaaat tttggatctt caacatttca
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cacatetett tattggettg aaaaagtgte teatgatgee ateaaaatee caaagtggte
                                                                      840
acctttgtca gaaatgcacc ctgtagatta ttactcttct tatacaaaaa actgcactgg
                                                                      900
aagatttacw aaaaaagaaa ttaakaatat tagagcattt tattatgcta tgtgtgctga
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                                                                     1020
gacagatgcc atgcttggtg aaattatttt ggcccttcat caattagatc ttcttcagaa
aactattgtc atatactcct cagaccatgg agagctggcc atggaacatc gacagtttta
                                                                     1080
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taaageegge etacaagtat caaatgtggt ttetettgtg gatatttace etaceatget
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gtgaattacc atggatgtaa tgtgaatgcc tccacctaca tgcttcgaac taaccacttg
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                                                                     1440
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ggatccagat gaattaacaa atgttgctgt aaaatttccc agaaattact tattctttgg
                                                                     1500
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caaattttag gtggcaccaa gactggcaga aggaaccaag gaagtatgaa aatgcaattg
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gttttaataa ttaccaagtt ttggccgggc acagtggctc acacctgtaa tcccaggact
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                                                                     1920
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                                                                     1980
qqtqaaaccc tqtctctact aaaaatacaa aaattagctg ggcgcggtgg tgcacaccta
tagteteage tacteagagg etgaggeagg aggategett gaacceggga ggeageagtt
                                                                     2040
geagtgaget gagattgege caetgtacte cageetggea acagagtgag actgtgtege
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<210> 133
<211> 694
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<212> DNA <213> Homo sapiens <220> <221> misc feature

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<221> misc feature
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<223> n equals a,t,q, or c
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ggaaaggggc cacagagaag ttgtctgcat tcaaaagagc attctattaa agctacctta
                                                                      180
atttggcgct tatttttctt aatcatgttt ctgacaatca tagtgtgtgg aatggttgct
                                                                      240
getttaagyg caataagage taactgecat caagagecat cagtatgtet teaagetgea
                                                                      300
tgcccaqaaa gctggattgg ttttcaaaga aagtgtttct atttttctga tgacaccaag
                                                                      360
aactggacat caagtcagag gttttgtgac tcacaagatg ctgatcttgc tcaggttgaa
                                                                      420
                                                                      480
agmttccagg aactgktaag aaaatagttc tggccagaat caaagattca gccctacaag
gatatgtttt cctgtgaaat tatctaagag aatttcctgt tgagatataa aggcccatct
                                                                      540
gatcactgga ttgggctgas caragaacaa ggccaaccat ggaaatggat aaatggtact
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gaatggacaa gacagtaagt nctaaaaaatc tggcagtaat atttgtattt naatttactt
                                                                      660
                                                                      694
tgcattaaat ctgaagtgtt ctctagttac atgc
<210> 134
<211> 1032
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (5)..(5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (593)..(593)
<223> n equals a,t,q, or c
<400> 134
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                                                                      120
tgctggtatc actgcagtgc ttgttgcagc tgtagaatyt ytgagctgcg tgcagtgtaa
                                                                      180
ttcatgggaa aaatcctgtg tcaacagcat tgcctctgaa tgtccctcac atgccaacac
                                                                      240
cagetgtate agetecteag ceageteete tetagagaca eeagteagat tataceagaa
                                                                      300
tatgttetge teageggaga actgeagtga ggagacacae attacageet teaetgteea
                                                                      420
cgtgtctgct gaagaacact ttcattttgt aagccagtgc tgccaaggaa aggaatgcag
                                                                      480
caacaccagc gatgccctgg accctccccc tgaagaacgt gtccagcaac gcagagtgcc
ctgcttgtta tgaatctaat ggaactttcc tgtcatggga agccctggaa atgctatgaa
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gaagaacagt gtgtccttcy tagttgcaga acttaagaat gacattgagt ctnaagagtc
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                                                                      660
tegtgetgaa aggetgttee caacgteagt aacgecacet gteagtteet gtetggtgaa
aacaagactc ttggaggagt catctttcga aagtttgagt gtgcaaatgt aaacagctta
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acceccacgt etgeaccaac caetteccae aacgtggget ccaaagette cetetacete
                                                                      780
ttggcccttg ccagcctcct tcttcgggga ctgctgccct gaggtcctgg ggctgcactt
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tgcccagcac cccatttctg cttctctgag gtccagagca tcccctgcgg tgctgacacc
                                                                      900
ctettteect getetgeece gtttaactge ceagtaagtg ggagteacag gtetecagge
                                                                      960
aatgccgaca gctgccttgt tcttcattat taaagcactg gttcattcac tgaaaaaaaa
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aaaaaaaaa aa
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<211> 537 <212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c
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<221> misc feature
<222> (502)..(502)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (520)..(520)
<223> n equals a,t,g, or c
<400> 135
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aagageteta gggtcataga accaactete actaactgae acagatatea ggatecaace
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catgoccaca gtattacccc aagtototaa ctagotggtg taaccaataa tggaaagaaa
                                                                    360
aaaagtaata ttctgttctt caacttcaac agagaataat agtgaaagaa tggtgatatt
                                                                    420
tttcctaana tggactaaca agtatcctga gttgggaggt gacttccaat agtaaacaat
                                                                    480
                                                                    537
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<210> 136
<211> 917
<212> DNA
<213> Homo sapiens
<400> 136
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teateacete tateetetee teeetggeea geeteetget cetggeette etggeagegt
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ccaccgcacg cttgagccct cagtcacttc cagagacctg ataccggggt tagtcagggc
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aaccacctgg aggaagtggg ccaggagctg cttctagaag gaaggaaagg gagagactgc
                                                                    300
aggaggaccg gggacccagt gctgcctcct ctccccatcc agctccagcc tgtggtggcc
                                                                    360
ggaggaggcc ccggagcagc tgagaattgg ctccttcatg gggaagcgct acatgaccca
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                                                                    480
ccacatocca cccagegaag ccgccaccot gcccgtgggc tgtgagcctg gcctggaccc
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cetececage etcageceet ageetggeee ttgtggetgg ggegtgtgtg getgtggeea
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caaaqtccca ctgatgtagg acagatgtca gggttctaga cgtctttggt gcaaaaaggg
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ggagtggccc gttatatata ctttcgagtt gggagggctt agagagagcg taagtctcta
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917
aaaaaaaaa aaaaaaa
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<211> 1384
<212> DNA
<213> Homo sapiens
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tgacggaggg gcactatatg acactgeece tgtccctgga ccagetgeec tgtcaggace
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ccqcaqgcqg cggcagggac gtccccttgc tgcgggtggg caatgacccc ggctgccttg
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cetteetgge agegteeace scaegettet ceageetgtg gtggeeggag gargeeegg
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tatatacttt cgagttggga gggcttagag agagcgtaag tctctaagga attttggaag
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caaggtotoc agggtootga gggggotago tgttgttagg aaaaggtoat ttattactgt
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1384
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gattacagaa actoctatga aattgaatat atggagaaaa ttggctcctc cttacctcag
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gacgacgatg ccccgaagaa gcaggccttg taccttatgt ttgacacttc tcaggagagc
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cctgtcaagt catctcccgt ccgcatgtca gagtccccga cgccgtgttc agggtcaagt
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ggactggccc ctacccaaga gtcacacttg caggtgccag agaaatcctc ccagaaggag
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1720
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<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c
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<221> misc feature
<222> (718)..(718)
<223> n equals a,t,g, or c
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<222> (1116) ... (1116)
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<221> misc feature
<222> (1122) ... (1122)
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<221> misc_feature
<222> (1127) ... (1127)
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<221> misc feature
<222> (1312)..(1312)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (1455) .. (1456)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (1540) .. (1540)
<223> n equals a,t,g, or c
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qaqtttctct cttgctcatg taaagactgg tcagggaccc aggttgacag aggctcttca
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gaaatggaac ttagctatgt gctcaagagg aaaagtaaaa cagttattga ataattagta
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cagagagaga ctttgtcctc aaaaccctcc catttcagaa gtgaggagcc tggggaggtc
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cagtttccca ttccagtgct ctttctatga ggaaagtata agtttgagca tttttaaacc
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                                                                   1440
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gattetetae ttttnnaaat cataaggtea gttetttaat taaaagataa agaaaagtag
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aaaaaa
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<213> Homo sapiens
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (709)..(709)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (716)..(716)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (733)..(733)
<223> n equals a,t,g, or c
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<213> Homo sapiens
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120

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aaactgtaag aggcacagat gactccacca gctgcagagt gactctgaag agagtcttca
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ccacctcccc ccacccccat ctccaggagg caggtagagc agttctgacc gagaggatag
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actgctgttg ctgtctttcc ccagctctga actagtttta aggtagctta ggatgaaaaa
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caggaagaat cccttcctct tggggtcctt gatgggcatg tgtgatgggg aaggagcagt
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                                                                     1200
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cattetteat tttgttatac etcaetteet ttteettage aagatetttg ceatagagta
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cagctcaaga tcaaggggaa gaaatgtata tgaggctcag ttcatgttca gttttttttt
                                                                      360
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tggggcaagc tcttcccagc tttgtggggg cccttggaaa acatccactg agatggaggc
                                                                      300
agtettette etettettee teetgeteet ettgacetgg accageaaga tageaccaat
                                                                      360
                                                                      420
cettttetee tgatggeagt atetgaatga ettteacage tgaaggeeag agaccageet
acagetggga ttcaggette aaagetttgg tgaggatgae tecagaacca ggcaggtagt
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coccetecag gatgocatgg cetaaageat tteactecte agteactagg etgtgaacte
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                                                                      720
gagcacggat gctttgggtc agttacttca gctctgagag gctcaattgc ctcacctgtg
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aaatgggtta gtgattccag gaatcttacc aggccccatg gacagcatgt acataaagag
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cctagccctt ccctctcctc cctctccagg ggccaggcct gactcccctg aagccatttc
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cttaccattt tgatccctaa gcctgttatc agatcttctt tctgatctac caccatggct
                                                                      960
caaatettge cetteateet tgeetttete aaagacaaaa acaecettee tetgeteeae
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tcagagtgta gcggggaggc ttatactgca gtggttaaga gcatatccct ggaattggaa
                                                                     1080
                                                                     1140
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                                                                      120
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cetcageete eccagtaggt gggactaegg gtgtgeaaca caacateegg etaatttttg
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                                                                      420
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                                                                      540
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                                                                      720
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                                                                      780
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<211> 865
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<221> misc_feature
<222> (409) .. (409)
<223> n equals a,t,g, or c
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                                                                  120
                                                                  180
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aaagtatgtc aggaaaaact aggaagaata gggctgaact gtggcttgat ttcaggagag
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gctgggagcc ccaggataca gacttttggt taaataacat ctgctccact ctgccttccc
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<213> Homo sapiens
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ctagagaarg ggtatattat acatcgcttt ttgtgactca ctttttggca aacattatgc
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<211> 470
<212> DNA
<213> Homo sapiens
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egecageeet egagagetet gtgeteeaeg eegaggatge accgtetetg gattggteeg
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gccttcttcc taatgacatc gctcagcgtc tctggagccg tcatcccgcg gaatgggggc
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<213> Homo sapiens
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<211> 1048
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<220>
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<223> n equals a,t,g, or c
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<221> misc feature

60

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  <223> Xaa equals any of the naturally occurring L-amino acids
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200

195

205

Leu Gln Arg Glu Ile Arg Leu Thr Gln Lys Ala Glu Tyr Ala Thr Ala

Lys Ala Leu Ala Thr Pro Ala Ala Thr Pro Asp Leu Ala Trp Gly Pro 225

Ala Pro Gly Thr Glu Arg Gly Asp Val Pro Leu Pro Ala Pro Thr Ala

Thr Asp Val Val Pro Gly Ala Ala 260

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<211> 237

<212> PRT <213> Homo sapiens

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<220>

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Val Asn Ser Ile Ala Ser Glu Cys Pro Ser His Ala Asn Thr Ser Cys 35 40

Ile Ser Ser Ser Ala Ser Ser Ser Leu Glu Thr Pro Val Arg Leu Tyr 55

Gln Asn Met Phe Cys Ser Ala Glu Asn Cys Ser Glu Glu Thr His Ile

Thr Ala Phe Thr Val His Val Ser Ala Glu Glu His Phe His Phe Val 90

Ser Gln Cys Cys Gln Gly Lys Glu Cys Ser Asn Thr Ser Asp Ala Leu 100

Asp Pro Pro Leu Lys Asn Val Ser Ser Asn Ala Glu Cys Pro Ala Cys 120

Tyr Glu Ser Asn Gly Thr Ser Cys Xaa Gly Lys Pro Trp Lys Cys Tyr 135

Glu Glu Glu Gln Cys Val Xaa Leu Val Ala Glu Leu Lys Asn Asp Ile 155 150

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81
Glu Ser Lys Ser Leu Val Leu Lys Gly Cys Ser Asn Val Ser Asn Ala
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Thr Cys Gln Phe Leu Ser Gly Glu Asn Lys Thr Leu Gly Gly Val Ile
Phe Arg Lys Phe Glu Cys Ala Asn Val Asn Ser Leu Thr Pro Thr Ser
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Ala Pro Thr Thr Ser His Asn Val Gly Ser Lys Ala Ser Leu Tyr Leu
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<211> 175
<212> PRT
<213> Homo sapiens
<220>
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<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (155)
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<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids
<400× 153
Met Tyr Trp Ile Val Phe Ala Leu Tyr Thr Val Ile Glu Thr Val Ala
Asp Gln Thr Val Ala Trp Phe Pro Leu Tyr Tyr Glu Leu Lys Ile Ala
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Phe Val Ile Trp Leu Leu Ser Pro Tyr Thr Lys Gly Ala Ser Leu Ile 35 40 45

Tyr Arg Lys Phe Leu His Pro Leu Leu Ser Ser Lys Glu Arg Glu Ile

Asp Asp Tyr Ile Val Gln Ala Lys Glu Arg Gly Tyr Glu Thr Met Val

Asn Phe Gly Arg Gln Gly Leu Asn Leu Ala Ala Thr Ala Ala Val Thr

Ala Ala Val Lys Ser Gln Gly Ala Ile Thr Glu Arg Leu Arg Ser Phe

Ser Met His Asp Leu Thr Thr Ile Gln Gly Asp Glu Pro Val Gly Gln

Arg Pro Tyr Gln Pro Leu Pro Glu Ala Lys Lys Lys Ser Xaa Gln Pro

Pro Val Asn Gln Xaa Val Met Glu Phe His Xaa Lys Thr Xaa Met Xaa 150

Lys Gln Xaa Lys Lys Gln Arg Gly His Ile Gln Ile Met Arg Cys 170 165

<210> 154

<211> 197

<212> PRT

<213> Homo sapiens

<400> 154

Met Cys Thr Gly Lys Cys Ala Arg Cys Val Gly Leu Ser Leu Ile Thr 10

Leu Cys Leu Val Cys Ile Val Ala Asn Ala Leu Leu Leu Val Pro Asn 25

Gly Glu Thr Ser Trp Thr Asn Thr Asn His Leu Ser Leu Gln Val Trp

Leu Met Gly Gly Phe Ile Gly Gly Gly Leu Met Val Leu Cys Pro Gly

Ile Ala Ala Val Arg Ala Gly Gly Lys Gly Cys Cys Gly Ala Gly Cys

Cys Gly Asn Arg Cys Arg Met Leu Arg Ser Val Phe Ser Ser Ala Phe

Gly Val Leu Gly Ala Ile Tyr Cys Leu Ser Val Ser Gly Ala Gly Leu

Arg Asn Gly Pro Arg Cys Leu Met Asn Gly Glu Trp Gly Tyr His Phe

Glu Asp Thr Ala Gly Ala Tyr Leu Leu Asn Arg Thr Leu Trp Asp Arg 130

Cys Glu Ala Pro Pro Arg Val Val Pro Trp Asn Val Thr Leu Phe Ser

Leu Leu Val Ala Ala Ser Cys Leu Glu Ile Val Leu Cys Gly Ile Gln

Leu Val Asn Ala Thr Ile Gly Val Phe Cys Gly Asp Cys Arg Lys Lys

Gln Asp Thr Pro His 195

<210> 155

<211> 43

<212> PRT <213> Homo sapiens

<400> 155

Met Leu Ser Phe Val Ser Arg Cys His Trp Ser Ser Ile Ala Glu Glu

Ser Glu Phe Leu Phe Leu Ile Leu Val Cys Tyr Phe Ser Ser Cys

Ser Ser Cys Ile Ile His Gln Trp Tyr Tyr Val 35

<210> 156

<211> 313

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (167)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 156

Met Asn Gln Leu Ser Phe Leu Leu Phe Leu Ile Ala Thr Thr Arg Gly 10

Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Lys Glu Trp Thr Cys Ser

Ser Ser Pro Ser Leu Pro Arq Ser Cys Lys Glu Ile Lys Asp Glu Cys

Xaa Ser Ala Phe Asp Gly Leu Tyr Phe Leu Arg Thr Glu Asn Gly Val

Ile Tyr Gln Thr Phe Cys Asp Met Thr Ser Gly Gly Gly Trp Thr 70

Leu Val Ala Ser Val His Glu Asn Asp Met Arg Gly Lys Cys Thr Val

Gly Asp Arg Trp Ser Ser Gln Gln Gly Ser Lys Ala Asp Tyr Pro Glu 100 105 110

Gly Asp Gly Asn Trp Ala Asn Tyr Asn Thr Phe Gly Ser Ala Glu Ala 115 120 125

Ala Thr Ser Asp Asp Tyr Lys Asn Pro Gly Tyr Tyr Asp Ile Gln Ala 130 135 140

Lys Asp Leu Gly Ile Trp His Val Pro Asn Lys Ser Pro Met Gln His 145 $$ 150 $$ 155 $$ 160

Trp Arg Asn Ser Ser Leu Xaa Arg Tyr Arg Thr Asp Thr Gly Phe Leu 165 170 175

Gln Thr Leu Gly His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val 180 \$180\$

Val Val Tyr Asp Phe Gly Asp Ala Gln Lys Thr Ala Ser Tyr Tyr Ser 210 215 220

Pro Tyr Gly Gln Arg Glu Phe Thr Ala Gly Phe Val Gln Phe Arg Val 225 $$ 230 $$ 235 $$ 240

Phe Asn Asn Glu Arg Ala Ala Asn Ala Leu Cys Ala Gly Met Arg Val245 250 250

Pro Glu Ala Ser Pro Gln Gln Cys Gly Asp Phe Ser Gly Phe Asp Trp 275 280 285

Ser Gly Tyr Gly Thr His Val Gly Tyr Ser Ser Ser Arg Glu Ile Thr 290 $\,$ 295 $\,$ 300 $\,$

Glu Ala Ala Val Leu Leu Phe Tyr Arg 305 310

<210> 157

<211> 116

<212> PRT

<213> Homo sapiens

<400> 157

Met Thr Pro Leu Leu Thr Leu Ile Leu Val Val Leu Met Gly Leu Pro 1 5 10 15

Leu Ala Gl
n Ala Leu Asp Cys His Val Cys Ala Tyr Asn Gly Asp Asn 20 25 30

Cys Phe Asn Pro Met Arg Cys Pro Ala Met Val Ala Tyr Cys Met Thr 35 40 45

85 Thr Arg Thr Tyr Tyr Thr Pro Thr Arg Met Lys Val Ser Lys Ser Cys 55 Val Pro Arg Cys Phe Glu Thr Val Tyr Asp Gly Tyr Ser Lys His Ala Ser Thr Thr Ser Cys Cys Gln Tyr Asp Leu Cys Asn Gly Thr Gly Leu Ala Thr Pro Ala Thr Leu Ala Leu Ala Pro Ile Leu Leu Ala Thr Leu Trp Gly Leu Leu 115 <210> 158 <211> 173 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (83) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (110) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (115) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (118) <223> Xaa equals any of the naturally occurring L-amino acids <220× <221> SITE <222> (168) <223> Xaa equals any of the naturally occurring L-amino acids <400> 158 Met Gln Leu Ile Pro Leu Glu Gln Leu Cys Met Leu Leu Met Ser

Asp Asn Val Asp Arg Cys Phe Glu Thr Cys Pro Pro Arg Thr Phe Leu

Pro Ala Leu Cys Lys Ile Phe Leu Asp Glu Ser Ala Pro Asp Asn Val

Leu Glu Val Thr Ala Arg Ala Ile Thr Tyr Tyr Leu Asp Val Ser Ala 55

Glu Cys Thr Arg Arg Ile Val Gly Val Asp Gly Ala Ile Lys Ala Leu 65 70 75 80

Cys Asn Xaa Leu Val Val Val Glu Leu Asn Asn Arg Thr Ser Arg Asp $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$

Leu Ala Glu Gln Cys Val Lys Val Leu Glu Leu Ile Cys Xaa Pro Glu

Ser Gly Xaa Val Phe Xaa Ala Gly Gly Leu Asn Arg Val Ala Tyr Leu 115 120 125

Pro Ser Val Asn Ser Gly His Leu Val His Lys Asp Thr Leu His Ser 130 135 140

Ala Met Ala Val Val Ser Arg Leu Cys Gly Lys Met Glu Pro Gln Asp 145 150 150 155

Ser Ser Leu Glu Ile Cys Val Xaa Ser Leu Ser Ser Leu 165 170

<210> 159

<211> 67

<212> PRT

<213> Homo sapiens

<400> 159

Met Ile Phe Arg Asn Gly Val Arg Leu Val Phe Val Phe Val Leu Phe 1 5 10 15

Tyr Thr Ser Thr Gln Ser Leu Phe Asn Ser Leu Gln Thr Ala Glu Tyr $20 \\ 25 \\ 30$

Val Leu Phe Cys Gln Gln Arg Leu Ser Leu Tyr Glu Pro Ser His Val 35 40 45

Leu Cys Leu Cys Met Ser Pro His Arg Lys His Thr Arg Glu Ser Asp

Thr Ser Gly

<210> 160

<211> 228

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (134)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 160

Met Val Leu Gly Leu Phe Val Pro Pro Val Phe Val Val Ser Tyr Ala 1 5 10 15

Lys Asp Leu Gly Val Pro Asp Thr Lys Ala Ala Phe Leu Leu Thr Ile

Leu Gly Phe Ile Asp Ile Phe Ala Arg Pro Ala Ala Gly Phe Val Ala 35 40 45

Gly Leu Gly Lys Val Arg Pro Tyr Ser Val Tyr Leu Phe Ser Phe Ser 50 55 60

Met Phe Phe Asn Gly Leu Ala Asp Leu Ala Gly Ser Thr Ala Gly Asp 65 70 75 80

Tyr Gly Gly Leu Val Val Phe Cys Ile Phe Phe Gly Ile Ser Tyr Gly $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Met Val Gly Ala Leu Gln Phe Glu Val Leu Met Ala Ile Val Gly Thr $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$

His Lys Phe Ser Ser Ala Ile Gly Leu Val Leu Leu Met Glu Ala Val 115 $$\rm 120$$

Ala Val Leu Val Gly Xaa Pro Ser Gly Gly Lys Leu Leu Asp Ala Thr 130 135 140

His Val Tyr Met Tyr Val Phe Ile Leu Ala Gly Ala Glu Val Leu Thr 145 \$150\$

Ser Ser Leu Ile Leu Leu Gly Asn Phe Phe Cys Ile Arg Lys Lys \$165\$ \$170\$ \$170\$

Pro Lys Glu Pro Gln Pro Glu Val Ala Ala Ala Glu Glu Lys Leu 180 185 190

His Lys Pro Pro Ala Asp Ser Gly Val Asp Leu Arg Glu Val Glu His 195 200

Glu Thr Ser Val 225

<210> 161 <211> 36

<212> PRT <213> Homo sapiens

<400> 161

Met Asn Gly Leu Val Arg Pro Val Glu Leu Asn Ser Leu Leu Leu Pro
1 5 10 15

Val Val Arg Tyr Gln Val Ala Gln Pro Gln Lys Leu Leu Asn Val Phe 20 25 30

Val Gly Gly Leu 35

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<211> 98
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<213> Homo sapiens

<400> 162

Met Lys Leu Met Val Leu Val Phe Thr Ile Gly Leu Thr Leu Leu Leu 1 5 10 15

Gly Val Gln Ala Met Pro Ala Asn Arg Leu Ser Cys Tyr Arg Lys Ile 20 25 30

Leu Lys Asp His Asn Cys His Asn Leu Pro Glu Gly Val Ala Asp Leu
35 40 45

Thr Gln Ile Asp Val Asn Val Gln Asp His Phe Trp Asp Gly Lys Gly 50 60

Cys Glu Met Ile Cys Tyr Cys Asn Phe Ser Glu Leu Leu Cys Cys Pro 65 70 80

Lys Asp Val Phe Phe Gly Pro Lys Ile Ser Phe Val Ile Pro Cys Asn 85 90 95

Asn Gln

<210> 163

<211> 89

<212> PRT

<213> Homo sapiens

<400> 163

Met Tyr His Tyr Ala Trp Leu Ile Phe Val Phe Leu Val Glu Met Gly 1 5 10 15

Phe Cys His Val Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Ser Asp $20 \ 25 \ 30$

Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His 35 40 45

His Ala Trp Gly Lys Arg Tyr Phe Gln Asn Ile Val Asn Asn Phe Ser 50 60

Pro Lys Pro Arg Gln Gly Leu Ile Leu Leu Pro Arg Leu Glu Trp Gln 65 70 75 80

Gly His His Arg Ser Ser Leu Gln Pro

<210> 164

<211> 111

<212> PRT

<213> Homo sapiens

<400> 164

Met Gly Gly Leu Glu Pro Cys Ser Arg Leu Leu Leu Leu Pro Leu Leu

<212> PRT

DOGETHER STREET

Leu Ala Val Gly Leu Arg Pro Val Gln Ala Gln Ala Gln Ser Asp Cys 20 25 30

Ser Cys Ser Thr Val Ser Pro Gly Val Leu Ala Gly Ile Val Met Gly 35 40 45

Asp Leu Val Leu Thr Val Leu Ile Ala Leu Ala Val Tyr Phe Leu Gly 50 55 60

Arg Leu Val Pro Arg Gly Arg Gly Ala Ala Glu Ala Thr Arg Lys Gln $_{65}$ 70 $_{75}$ 80

Arg Ile Thr Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg 85 90 95

Ser Asp Val Tyr Ser Asp Leu Asn Thr Gln Arg Pro Tyr Tyr Lys 100 105 110

<210> 165

<211> 63 <212> PRT

<213> Homo sapiens

<400> 165

Met Ala Ser Leu Leu Gln Arg Asn Leu Cys Pro Arg Leu Ser Val Cys 1 10 15

Leu Val Phe Ile Gln Val Phe Val Cys Cys Val Glu Gly Gly Gly Arg

Arg Val Lys Ala Val Leu Phe Arg Ala Pro Phe Gly Glu His Ser Arg 35 40 45

Gln Asn Thr Leu Val Ile Pro Ser Gln Thr Gly Leu Gln Ala His

<210> 166

<211> 36

<212> PRT <213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 166
Met Asn Pro Phe Ser Val Phe Xaa Ser Leu Cys Leu Lys Gln Phe Glu
Asp Val Xaa Leu Phe Leu Gly Leu Met Phe Gly Xaa Ser Leu Asn Gly
Gln Glu Gly Thr
        35
<210> 167
<211> 38
<212> PRT
<213> Homo sapiens
<400> 167
Met Tyr Ile Phe Tyr Leu Tyr Lys Ile Tyr Ile Tyr Thr His Ile Cys
Ile Tyr Ile Pro Leu Phe Leu Cys Leu Leu Ile Leu Ala Ile Lys Glu
                                25
Gly Ala Ala Phe Asn Val
        35
<210> 168
<211> 61
<212> PRT
<213> Homo sapiens
<400> 168
Met Asn Glu Ser Val Tyr Asp Asp Ser Thr Ser Ser Tyr Thr Pro Ser
                                     10
Leu His Ile Leu Gly Cys Leu Leu Leu Leu Phe Leu Gly Val Glu Arg
                                 25
Ala Leu Glu Pro Phe Ser Gly Leu Cys Ala Ser Leu His Asp Val Arg
                             40
Pro Ile Val Asn Pro Leu Thr Ser Phe Ser Leu Ile Tyr
     50
<210> 169
<211> 45
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 169
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Met Ser Asp Lys Leu Ser Pro Ser Thr Val Pro Leu Leu Leu Pro Val

Leu Phe Lys Val Thr Ile Leu Leu Gln Arg Val Cys Pro Glu Asp Ser 20 25 30

Pro Ser Ser Val Leu Pro Glu Ser Val Xaa Arg Glu 35 40 45

<210> 170

<211> 116 <212> PRT

<213> Homo sapiens

<400> 170

Met Thr His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val

Ala Leu Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser

Arg Gly Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg

Arg Leu Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly 50

Cys Leu Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His $65 70 75 $ 80

Trp Leu Thr Arg Val Leu Leu Pro Ser Ser His Leu Pro His Gly Asn $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Gly Met Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser 100 105 110

Val Met Ala Val

<210> 171 <211> 41

<212> PRT <213> Homo sapiens

<400> 171

Met Ser Val Leu Phe Val Ala Val Ser Leu Leu Ser Ser Ile Val Pro 1 5 10 15

Asp Ile Gln Tyr Arg Leu Lys Thr Tyr Leu His Ile Asp Leu Trp Lys

Thr Asp Thr Gln Val Leu Lys Asn Lys 35 40

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<211> 281
<212> PRT
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<213> Homo sapiens

<220>

<221> SITE <222> (216)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (227)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (268)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 172

Met Gly Phe Pro Gln Arg Gln Pro Gly Leu Ser Gly Leu Leu Leu Leu 1 5 10 15

Val Trp Ala Leu Ala Trp Pro Leu Pro Cys Met Ser Leu Glu Leu Ile 20 25 30

Pro Tyr Thr Pro Gln Ile Thr Ala Trp Asp Leu Glu Gly Lys Val Thr $35 \ \ 40 \ \ 45$

Ala Thr Thr Phe Ser Leu Glu Gln Pro Arg Cys Val Leu Asp Gly Leu 50 60

Ala Gly Val Ala Ser Thr Ile Trp Leu Val Val Ala Phe Ser Asn Ala 65 70 75 80

Ser Arg Asp Phe Gln Asn Pro Gln Thr Arg Ala Glu Ile Pro Ala Phe 85 90 95

Pro Arg Leu Thr Glu Gly His Tyr Met Thr Leu Pro Leu Ser Leu 100 \$105\$

Asp Gln Leu Pro Cys Gln Asp Pro Ala Gly Gly Gly Arg Asp Val Pro 115 120 125

Leu Leu Arg Val Gly Asn Asp Pro Gly Cys Leu Ala Asp Leu Leu Gln 130 135

Pro Pro Tyr Cys Asn Ser Pro Leu Pro Ser Pro Gly Pro Tyr Arg Val 145 150 155 160

Lys Phe Leu Leu Met Asp Ala Arg Gly Ser Pro Gln Ala Glu Thr Arg 165 170 175

Trp Ser Asp Pro Ile Ala Leu His Gln Gly Lys Ser Pro Ala Ser Ile 180 185 190

Asp Thr Trp Pro Gly Arg Arg Ser Gly Gly Met Ile Val Ile Thr Ser

Ile Leu Ser Ser Leu Ala Ser Xaa Leu Leu Leu Ala Phe Leu Ala Ala 210 215 220

Ser Thr Xaa Arg Phe Ser Ser Leu Trp Trp Pro Glu Glu Ala Pro Glu 225 230 230

Gln Leu Arg Ile Gly Ser Phe Met Gly Lys Arg Tyr Met Thr His His 245 250 255

Ile Pro Pro Ser Glu Ala Ala Thr Leu Pro Val Xaa Cys Glu Pro Gly 260 265 270

Leu Asp Pro Leu Pro Ser Leu Ser Pro 275 280

<210> 173 <211> 5

<211> 5

<213> Homo sapiens

<400> 173

Met Gly Tyr Leu Asn

<210> 174

<211> 58 <212> PRT

<213> Homo sapiens

<400> 174

Met Pro Phe Ala Trp Asn Asp Leu Thr Ser Leu Leu Phe Tyr Leu Ala 1 5 10 15

Gly Cys Phe Ser Ser Cys Arg Leu Gly Gln Gly Thr Pro Gly Ser Leu \$20\$

Pro Trp Thr Ser Asn Glu Glu Gly Ile Ile Gln Gly Pro Thr Pro Met $35 \hspace{1cm} 40 \hspace{1cm} 45 \hspace{1cm}$

Phe Trp Asn Leu Thr Pro Phe Ser Gly Thr

<210> 175

<211> 179

<212> PRT

<213> Homo sapiens

<400> 175

Leu Leu Ala Cys Leu Ala Trp Phe Ser Gly Asn Ser Ser Lys Gly Val 20 25 30

Asp Phe Gly Leu Ser Ile Leu Trp Phe Leu Ile Phe Thr Pro Cys Ala $35 \hspace{1cm} 40 \hspace{1cm} 45$

Phe Leu Cys Trp Tyr Arg Pro Ile Tyr Lys Ala Phe Arg Ser Asp Asn 50 55 60

Ser Phe Ser Phe Phe Val Phe Phe Phe Val Phe Phe Cys Gln Ile Gly 65 70 75 80

Ile Tyr Ile Ile Gln Leu Val Gly Ile Pro Gly Leu Gly Asp Ser Gly $85 \hspace{1.5cm} 90 \hspace{1.5cm} 95$

Trp Ile Ala Ala Leu Ser Thr Leu Asp Asn His Ser Leu Ala Ile Ser 100 105 110

Val Ile Met Met Val Val Ala Gly Phe Phe Thr Leu Cys Ala Val Leu 115 120 125

Ser Val Phe Leu Leu Gln Arg Val His Ser Leu Tyr Arg Arg Thr Gly 130 $$135\$

Ala Ser Phe Gln Gln Ala Gln Glu Glu Phe Ser Gln Gly Ile Phe Ser 145 $$ 150 $$ 155 $$ 160

Ser Arg Thr Phe His Arg Ala Ala Ser Ser Ala Ala Gln Gly Ala Phe 165 \$170\$

Gln Gly Asn

<210> 176

<212> PRT <213> Homo sapiens

<400> 176

Met Thr Ser His Pro Ser Trp Arg Leu Ile Leu Val Thr Ser Leu Val 1 5 10 15

Leu Gly Val Glu Pro Glu Glu Ala Pro Gly Glu Ala Gly Glu Gly Ser 20 25 30

Gly Gly Gln Arg Thr Met Asp Pro Glu Gln Lys Trp

<210> 177

<211> 77

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 177

Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu Phe Thr Leu 1 5 10 15

Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys

DAGYERYS . ICICCI

Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly Asp Asn Glu

25

Glu Arq Thr Arg Val Ser Thr Asp Lys Arg Gln Asp Tyr Trp Glu Gln

Leu Arg Cys Leu Xaa Glu Arg Phe Thr Ile Thr Ala Gly

<210> 178

<211> 31

<212> PRT

<213> Homo sapiens

<400> 178

Met Ser Val Lys Val Gly Ser Leu Leu Val Leu Val Tyr Phe Thr Leu

Gly Pro Val Val Ala Glu Leu Glu Val Thr Leu Pro Ser His Ser 25

<210> 179

<211> 257

<212> PRT <213> Homo sapiens

<400> 179

Met Ala Ala Leu Thr Thr Val Val Val Ala Ala Ala Ala Thr Ala Val 10

Ala Gly Ala Val Ala Gly Ala Gly Ala Ala Thr Gly Thr Gly Val Gly

Ala Thr Pro Ala Pro Gln Gln Ser Asp Gly Cys Phe Ser Thr Ser Gly

Gly Ile Arq Pro Phe His Leu Gln Asn Trp Lys Gln Lys Val Asn Gln

Thr Lys Lys Ala Glu Phe Val Arg Thr Ala Glu Lys Phe Lys Asn Gln

Val Ile Asn Met Glu Lys Asp Lys His Ser His Phe Tyr Asn Gln Lys

Ser Asp Phe Arg Phe Glu His Ser Met Leu Glu Glu Leu Glu Asn Lys

Leu Ile His Ser Arg Lys Thr Glu Arg Ala Lys Phe Gln Gln Gln Leu 120

Ala Lys Ile His Asn Asn Val Lys Lys Leu Gln His Gln Leu Lys Asp 130 135

Val Lys Pro Thr Pro Asp Phe Val Glu Lys Leu Arg Glu Met Met Glu

160 145 150 155 Glu Ile Glu Asn Ala Ile Asn Thr Phe Lys Glu Glu Gln Arg Leu Ile 170 Tyr Glu Glu Leu Ile Lys Glu Glu Lys Thr Thr Asn Asn Glu Leu Ser Ala Ile Ser Arg Lys Ile Asp Thr Trp Ala Leu Gly Asn Ser Glu Thr Glu Lys Ala Phe Arg Ala Ile Ser Ser Lys Val Pro Val Asp Lys Val Thr Pro Ser Thr Leu Pro Glu Glu Val Leu Asp Phe Glu Lys Phe Leu 230 Gln Gln Thr Gly Gly Arg Gln Gly Ala Trp Asp Val Ile Thr Arg Thr 250 Leu <210> 180 <211> 37 <212> PRT <213> Homo sapiens <400> 180 Met Ala Phe Leu Leu Thr Leu Val Pro Leu Leu Pro Ser Arg Cys Leu Gly Leu Glu Glu Met Ala Val Pro Asn Ser Thr Cys Ile Ser Pro Phe 25 Ser Cys Cys Tyr Gly <210> 181 <211> 344 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (126) <223> Xaa equals any of the naturally occurring L-amino acids

DSSTEETS . ICIOCI

<220> <221> SITE <222> (128) <223> Xaa equals any of the naturally occurring L-amino acids <400> 181

Met Glu Lys Ile Gly Ser Ser Leu Pro Gln Asp Asp Asp Ala Pro Lys 10

- Lys Gln Ala Leu Tyr Leu Met Phe Asp Thr Ser Gln Glu Ser Pro Val\$20\$ \$25\$
- Lys Ser Ser Pro Val Arg Met Ser Glu Ser Pro Thr Pro Cys Ser Gly $35 \hspace{1cm} 40 \hspace{1cm} 45$
- Ser Ser Phe Glu Glu Thr Glu Ala Leu Val Asn Thr Ala Ala Lys Asn 50 55 60
- Gln His Pro Val Pro Arg Gly Leu Ala Pro Asn Gln Glu Ser His Leu 65 70 75 80
- Gln Val Pro Glu Lys Ser Ser Gln Lys Glu Leu Glu Ala Met Gly Leu 85 90 95
- Gly Thr Pro Ser Glu Ala Ile Glu Ile Arg Glu Ala Ala His Pro Thr
- Asp Val Ser Ile Ser Lys Thr Ala Leu Tyr Ser Arg Ile Xaa Thr Xaa
- Glu Val Glu Lys Pro Ala Gly Leu Leu Phe Gln Gln Pro Asp Leu Asp 130 135 140
- Ser Ala Leu Gln Ile Ala Arg Ala Glu Ile Ile Thr Lys Glu Arg Glu 145 150 155 160
- Val Ser Glu Trp Lys Asp Lys Tyr Glu Glu Ser Arg Arg Glu Val Met 165 170 175
- Glu Met Arg Lys Ile Val Ala Glu Tyr Glu Lys Thr Ile Ala Gln Met 180 \$180\$
- Ile Glu Asp Glu Gln Arg Glu Lys Ser Val Ser His Gln Thr Val Gln 195 \$200\$
- Gln Leu Val Leu Glu Lys Glu Gln Ala Leu Ala Asp Leu Asn Ser Val 210 215 220
- Glu Lys Ser Leu Ala Asp Leu Phe Arg Arg Tyr Glu Lys Met Lys Glu 225 $$ 230 $$ 235 $$ 240
- Val Leu Glu Gly Phe Arg Lys Asn Glu Glu Val Leu Lys Arg Cys Ala $245 \hspace{1cm} 250 \hspace{1cm} 250 \hspace{1cm} 255 \hspace{1cm}$
- Gln Glu Tyr Leu Ser Arg Val Lys Lys Glu Glu Gln Arg Tyr Gln Ala 260 265 270
- Leu Lys Val His Ala Glu Glu Lys Leu Asp Arg Ala Asn Ala Glu Ile 275 280 285
- Ala Gln Val Arg Gly Lys Ala Gln Gln Glu Gln Ala Ala His Gln Ala 290 295 300
- Ser Leu Arg Lys Glu Gln Leu Arg Val Asp Ala Leu Glu Arg Thr Leu 305 $$ 310 $$ 315 $$ 320
- Glu Gln Lys Asn Lys Glu Ile Glu Glu Leu Thr Lys Ile Cys Asp Glu 325 330 335

Leu Ile Ala Lys Met Gly Lys Ser

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<210> 182
<211> 46
<212> PRT
<213> Homo sapiens
<400> 182
Met Met Leu Gly Leu Phe Ser Pro Leu Cys Leu Val Thr Gly Ile Ala
Glu Gly Arg Ala Glu Asp Ala Ser Leu His Asp Ile Cys Thr Thr Gln
His Thr Leu Thr Phe Thr Pro Ser Tyr Pro Val Gly Gly Ser
<210> 183
<211> 73
<212> PRT
<213> Homo sapiens
<400> 183
Met Gly Val Lys Leu Glu Ile Phe Arg Met Ile Ile Tyr Leu Thr Phe
Pro Val Ala Met Phe Trp Val Ser Asn Gln Ala Glu Trp Phe Glu Asp
                                 25
Asp Val Ile Gln Arg Lys Arg Glu Leu Trp Pro Pro Glu Lys Leu Gln
                             40
Glu Ile Glu Glu Phe Lys Glu Arg Leu Arg Lys Arg Arg Glu Glu Lys
Leu Leu Arg Asp Ala Gln Gln Asn Ser
                     70
<210> 184
<211> 30
<212> PRT
<213> Homo sapiens
<400> 184
Met Gln Leu Ser Lys Phe Leu Leu Phe Leu Phe Val Tyr Thr Arg Glu
Asn Pro Thr Ser Ala Cys Val Trp Gly Glu Lys Ser Thr Val
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<210> 185 <211> 31 <212> PRT

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99
<213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 185
Met Ile His Val Leu Thr Phe Leu Leu Gln Xaa Tyr Ile Leu Ile Ser
Lys Gly Lys Gly Asp Val Ser Gln Phe Val Lys Ser Arg Glu Tyr
<210> 186
<211> 76
<212> PRT
<213> Homo sapiens
<400> 186
Met Phe Phe Leu Leu Ile Leu Cys Trp Leu Leu Cys Leu Ser Leu Ser
Gly Leu Tyr Pro Arg Leu Leu Asn Pro Gly Gly Trp Leu Ser Leu Leu
Ser Phe Gln Met Asp Tyr Gly Trp Ile Leu Pro Trp Gly Ala Cys Thr
Val Arg His Gly Lys Pro Gly Met Gly Lys Arg Ser Gly Gly Ser Leu
Pro His Leu Thr Ala Leu Val Leu Cys Leu Thr Ser
                     70
<210> 187
<211> 98
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 187
Met Leu Ala Phe Pro Val Leu Leu Glu Val Ser Trp Ser Val Leu Phe
Xaa Phe Ser Phe Phe Ser Pro Xaa Pro Ser Ala Pro Gln Pro Pro Thr
```

25

Pro Ser Arg Ser Val Leu His Ala Arg Cys Ser Asn Val Arg Ser Glu 35 40 45

Met Ala Gly Thr Arg Glu Lys Leu Leu Val Ser Phe Val Ser Gly Ser 50 60

Gly Met Ala Leu Ser Ser Leu Ala Ser Leu Phe Val Leu Phe Glu Leu 65 70 75 80

Cys Arg Ser Leu Phe Ser Gln Ala Glu Leu Pro Thr Arg Ser Ile Leu 85 90 95

Asp Gln

<210> 188

<211> 65 <212> PRT

<213> Homo sapiens

<400> 188

Met Val Glu Asn Trp Val Leu Glu Glu Ser Pro Gly Arg Leu Leu Ala 1 5 10 15

Leu Phe Val Val Arg Arg Ala Leu Ala Gln Gly Gln Arg Glu Glu Lys \$20\$

Gly Gln Pro Ala Ala Val Glu Ser Ala Gly Trp Leu Pro Thr Arg Phe \$35\$ 40 45

Leu Ser Ser Gln Asp Ser Leu Pro Leu Ser Ser Arg Ile Ser Asn Gly 50 55 60

Leu 65

<210> 189

<211> 109

<212> PRT

<213> Homo sapiens

<400> 189

Met Ile Lys Lys Asp Lys Tyr His Lys Lys Val Phe Leu Phe Gly Trp $_{\rm 1}$

Phe Phe Cys Leu Phe Val Phe Phe Leu Arg Leu Ser Leu Ser Leu Leu Leu 20 25 30

Pro Lys Leu Glu Cys Asn Leu Gly Ser Leu Gln Pro Pro Pro Pro Arg \$35\$

Arg Pro Pro Pro His Leu Ala Asn Phe Cys Val Val Ser Arg Gly Gly 65 70 75 80

Val Ser Ser Cys Trp Pro Gly Trp Ser Arg Thr Pro Asp Leu Met Ile 85 90 95

Arg Leu Pro Arg Pro Pro Arg Val Leu Gly Leu Gln Ala

<210> 190

<211> 51 <212> PRT

<213> Homo sapiens

<400> 190

Met Arg Lys Ser Gly Ala Met Lys Lys Gly Gly Ile Phe Ser Ala Glu $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Phe Leu Lys Val Phe Ile Pro Ser Leu Phe Leu Ser His Val Leu Ala 20 25 30

Leu Gly Leu Gly Ile Tyr Ile Gly Lys Arg Leu Ser Thr Pro Ser Ala \$35\$

Ser Thr Tyr 50

<210> 191

<211> 80

<212> PRT

<213> Homo sapiens

<400> 191

Met Ala Phe Leu Pro Leu Thr Leu Thr Phe Cys Leu Ala Pro Leu Ala

Pro Leu Leu Pro Ser Ile Trp Gly Pro Thr Pro Ala Ser Cys Val Val $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Trp Pro Leu Leu Thr Ile Leu Pro Val Pro Ala Gln Ala Ser Pro Ser 35 40 45

Thr Asp Thr Ala His Leu Trp Gln Arg Pro Thr Thr Gly Ser Pro Thr 50 55 60

Arg Leu Val Arg Pro Leu Pro Arg Pro Gly Leu Pro Pro Met Trp Ala 65 $$ 70 $$ 75 $$ 80

<210> 192

<211> 31

<212> PRT

<213> Homo sapiens

<400> 192

Met Ile Thr Leu Cys Ile Phe Leu Leu Phe Lys Val Phe Val Gly Ile

5

Ile Leu His Tyr Leu Ile Gly Lys Asn Ile Tyr Val Tyr Ser Val 20 \$25\$

<210> 193

<211> 60

<212> PRT

<213> Homo sapiens

<400> 193

Met Leu Leu Ser Asn Leu Ser Leu Ser Leu Gln Pro Leu Leu Phe Leu 1 5 10 15

Phe Ser Phe Phe Leu Phe Cys Lys Met Gly Ser Arg Lys Gly Leu Arg $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

His Lys Thr Gln His Phe Ser Ser Met Thr Asp Gln Ile Leu Lys Gly $35 \ \ 40 \ \ 45$

Ser Val Arg Ser Pro Ala Leu Gly Gln Leu His Asp 50 55 60

<210> 194

DGG/38/8 . 101001

<211> 78

<212> PRT <213> Homo sapiens

<400> 194

Met Val Cys Phe Gln Ser Asn Lys Pro Ser Thr Ser Thr Trp Arg Gln 1 5 10 15

Leu Ser Phe Val Phe Val Leu Phe Cys Leu Phe Cys Leu Gly His Ala

Phe Leu Ser Leu Pro Phe Tyr Ile Leu Ser Ile Ile Ala Met Cys Leu 35 $$\rm 40$$

Glu Val Arg Gly Asn Leu Ile His Val Asp Phe Thr Leu Pro

<210> 195

<211> 73 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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103
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 195
Met Ser Phe Ser Leu Ala His Val Lys Thr Gly Gln Gly Pro Arg Leu
Thr Glu Ala Leu Gln Tyr Ile Ala Ser Lys Ile Ala Val Gly Val Thr
Ser Ser Gln Lys Ser Gly Glu Glu Arg Ala Met Xaa Thr Gln Glu Leu
Leu Met Asp Gln Ala Trp Asp Ser Val Cys His Phe His Gln His Pro
Thr His Gln Asn Xaa Val Thr Gly Pro
<210> 196
<211> 58
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Leu Cys Leu Leu Val Leu Thr Gly Leu Xaa Val Leu Ile Val Gly
Ile His Ile Leu Glu Leu Leu Ile Asp Glu Ala Ala Met Pro Arg Gly
Met Gln Gly Thr Ser Leu Gly Gln Val Ser Phe Ser Lys Leu Gly Ser
Phe Ala Ser Ser Ala Ser Leu Ser Ala Arg
                          55
<210> 197
<211> 31
<212> PRT
<213> Homo sapiens
<400> 197
Met Leu Gln Thr Leu Ile Leu Ile Phe Leu Leu Leu Pro Cys Tyr
```

Leu Glu Leu Cys Phe Ser Leu Ile Ser Ser Ser Ala Lys Thr

```
104
<210> 198
<211> 40
<212> PRT
<213> Homo sapiens
<400> 198
Met Pro Phe Ser Ser Ser Val Lys Cys Leu Phe Gly Val Leu Leu Arg
Phe Cys Phe Val Val Phe Ser Val Val Val Phe Thr Phe Phe Leu Ser
                                 25
Ile Pro Lys Arg Thr Leu Gly Tyr
<210> 199
<211> 43
<212> PRT
<213> Homo sapiens
<400> 199
Met Gly Gly Lys Gly Ile Asn Tyr Thr Met Pro His Ile Cys Leu Leu
Leu Leu Asn Ala Leu Val Val Ser Cys Leu Leu Leu Glu Ala Ile Leu
            20
Leu Gln His Leu Val Leu Cys Asn Glu Leu Pro
        35
<210> 200
<211> 41
<212> PRT
<213> Homo sapiens
<400> 200
Met Phe Met Leu Cys Asn Leu Leu Leu Pro Leu Leu Glu Phe Ile Phe
                                     10
Gly Ser Thr Tyr Leu Ser Thr Asp Leu Tyr Leu His Thr Cys Met Lys
             20
                                 25
Asn Val Phe Leu His Ile His Ser Phe
         35
<210> 201
<211> 53
<212> PRT
<213> Homo sapiens
```

Met Leu Val Leu Met Thr Thr Cys Ile Leu Ala Ala Val Cys Val His 1 10 15

Thr Ala Gln Cys Ala Pro Asp Ser Arq Met Asp Asn Asp Cys Pro Ser

His Gln Ala Gln Ile His Phe Arg Ala Ser Glu Val Arg Arg Gly Trp \$35\$

25

Thr Phe Asn His Asp 50

<210> 202

<210> 20.

<212> PRT <213> Homo sapiens

<400> 202

Met Gly Pro Ser Gln Arg Glu Val Thr Val Gln Trp His Arg Ala Leu

Phe Leu Leu Pro Leu Leu Leu Ser Thr Arg Thr Glu Thr Lys Asn 20 25 30

Phe Gly Phe Lys Trp Leu Lys Asp 35 40

<210> 203

<211> 75

<212> PRT

<213> Homo sapiens

<400> 203

Met Phe Thr Thr Arg Phe Pro Lys Leu Leu Ile Phe Pro Lys Ile Val

Thr Glu Asn Cys Cys Leu Leu Phe Cys Ser Phe Trp Gly Trp Trp Cys \$20\$

Trp Leu Gly His Ala Cys Glu Val Met Cys Val Ser Asp Leu Thr Asp $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Leu Phe Ser Leu Leu Ile Glu Arg Ala Leu Phe Thr Leu Phe Ile 50 55 60

Cys Phe Asp Thr Ser Ala Phe Ser Val Leu Ser

<210> 204

<211> 104

<212> PRT

<213> Homo sapiens

<400> 204

Met Leu Cys Pro Asn His Gly Leu Phe Pro Asp Pro Gly Phe Gln Cys

Pro Pro Leu Phe Gln Glu Val Gln Arg Asp Ala Pro His Arg Lys Gly

Ser Ala Thr Val Leu Pro Arg Cys Pro Pro Trp Val Pro Ser Leu Lys

His Arg Thr Ser His Thr Ser Ser Pro Ala Val Pro Leu Ile Leu Val

Pro Arg Leu Pro Ser Leu Gln Leu His Ser Phe Ile Gln His Ser Leu

Gly Asp Phe Tyr Ile Asp Thr Pro Arg Thr Glu Ala Trp Gly Lys Asp

Asp Gln Glu His Val Pro Ser Arg 100

<210> 205

<211> 98 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 205

Met Leu Pro Leu Tyr Phe Leu Gln Pro Tyr Leu Ser Leu Val Ile Phe

Ile Met Leu Arg Asp Asn Trp His Leu Leu Ala Leu Thr Cys Ser Tyr 20

Ser Ile Ile Trp Arg Leu Ser Pro Asp Thr Asn Pro Ser Pro Ile Ala 40

Pro Ser Arg His Xaa Gln Leu Xaa Val Val Ala Ile Ala Pro Leu Glu

Pro Ser Pro His Ser His Met Gln Ser Ile Pro Lys Asn Leu Ala Gln 70

Phe Ser Ser Ser Gln Met Phe Ser Leu Thr Leu Gln Leu Val Tyr Ile 85 90

Ser Ser

<210> 206

<211> 74

<212> PRT

<213> Homo sapiens

```
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 206
Met Glu Asn Asp Trp Gly Phe Gln Thr Thr Phe Phe Ser Leu Gly Leu
Tyr Leu Phe Thr Ile Trp Trp Ser Thr Val Gly Leu Pro Trp Thr Ser
Ser Thr Gln Arg Glu Leu Asp Met Lys Leu Glu Ala Ala Ala Leu Glu
Gly Lys Xaa Gly Ser Leu Gly Gln Pro Arg Pro Trp Gln Glu Glu Ser
Leu Pro Leu Gly Val Leu Asp Gly His Val
65
<210> 207
<211> 44
<212> PRT
<213> Homo sapiens
<400> 207
Met Phe His Val Phe Val Leu Leu Thr Phe Ile Ala Leu Ser Pro
Ser Gly Ile Arg Leu Leu Phe Gly Phe Ile Gln Lys Gly Leu Asn Leu
Asn Ser Phe Met Phe Arg Leu Glu Leu Leu His Phe
                             40
<210> 208
<211> 54
<212> PRT
<213> Homo sapiens
<400> 208
Met Phe Glu Asp Thr Leu Arg Thr Leu Tyr Ile Leu Leu Phe Tyr Leu
Arg Tyr Ile Cys Leu Leu Ser Pro His Ile Ala Leu Met Thr Leu Ile
Leu Ile Asp Gly Phe Leu Gln Cys Tyr Tyr Cys Ala Leu His Val Pro
                             40
```

Cys Ile Ile Ala Phe Leu 50

```
<210> 209
<211> 57
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Lys Ala Leu Val Gly Asn Ser Pro Pro Val Gly Asp Ser Gly Thr
Gln Pro Pro Ser Ala Leu Arg Leu Cys Leu Leu Lys Val Leu Arg Val
Leu Ser Met Tyr Leu Ala Asn Gly Glu Arg Val Trp Arg Thr His Lys
Arg Val Xaa His His Val Leu Arg Gly
     50
<210> 210
<211> 62
<212> PRT
<213> Homo sapiens
<400> 210
Met Pro Glu Asn Leu Val Leu Ile Leu Ala Leu Leu Leu Ser Val Cys
                                      10
Gly Leu Lys Gln Val Ile Phe Leu Ser Ala Ser Ile Tyr Ser Lys Met
                                 25
Cys Thr Leu Ile Ala Thr Lys Lys Val Val Ala Lys Thr Arg Asn Asp
                              40
Ala Tyr Trp Tyr Leu Ile Ser Leu Lys His Ile Val Gly Phe
                          55
<210> 211
<211> 39
<212> PRT
<213> Homo sapiens
<400> 211
Met Arg Glu Cys Tyr Phe Leu Gly Asn Phe Leu Leu Val Phe Leu Ile
 Leu Ala Ser Ser Phe Ile Tyr Val Leu Val Thr Gln Val Leu Gly Gly
                                  25
 Pro Ala Thr Leu Leu Ala Phe
```

35

```
<210> 212
<211> 47
<212> PRT
<213> Homo sapiens
<400> 212
Met Gln Ser Gly Arg Ser Trp Ala Leu Lys Met Val Leu Leu Cys Asn
Ser Cys Leu Gly Leu Gly Val Gly Ser Val Gly Pro Ser Met Ser Ser
Leu Phe Gly Ala Val Leu Ser Glu Thr Pro Gly Ser Ser Val Tyr
<210> 213
<211> 23
<212> PRT
<213> Homo sapiens
<400> 213
Met Ser Glu Leu Ser Ala Phe Met Phe Ser Thr Ile Ile Phe Leu Met
                                    10
         5
Ala Gln Pro Thr Ser Cys Phe
             20
<210> 214
<211> 46
<212> PRT
<213> Homo sapiens
<400> 214
Met Met Phe Cys Phe Leu Ile Trp Val Val Val Thr Phe Thr Tyr Ser
Leu Asn Cys Thr Phe Val Leu His Lys Phe Ile Ile Phe Pro Asn Phe
Lys Lys Val Lys Arg Arg Arg Lys Lys Leu Val Met Lys Val
                             40
<210> 215
<211> 38
<212> PRT
<213> Homo sapiens
<400> 215
Met Ile Leu Val Ser Lys Leu Phe Phe Gly Phe Ser Leu Met Phe Leu
Ile Phe Phe Pro Leu Ala Thr Met Thr Val His Val Leu Ile Asn Ile
                                 25
```

Gly Arg Ser Arg Tyr Lys 35

<210> 216 <211> 31

<212> PRT <213> Homo sapiens

<400> 216

Met Tyr Ile Leu Ser Leu Ser Cys Ser Ile Phe Phe Ser Phe Phe Phe 1 5 10 15

Phe Leu Phe Pro Phe Phe Arg Gly Leu Arg Lys Gly Gln Ala Lys 20 25 Gly Gln Ala Lys

<210> 217

<211> 45 <212> PRT

<213> Homo sapiens

<400> 217

Met Ser Asn Leu Met Val Ala Met Ile Ala Val Ile Thr Ile Ala Val 1 5 10 15

Ser Ile Pro Ser Thr Arg Ala Asp Thr Glu Ile Ser Tyr Thr Tyr Trp \$20\$ \$25\$ \$30

Ala Tyr Leu Ser Ile Leu Ala Gly Asn Asn Ala Trp Ile 35 40 45

<210> 218 <211> 24

<212> PRT <213> Homo sapiens

<400> 218

Met Ile Met Glu Glu Ile Phe Leu Asn Leu Ile Lys Asn Ile Tyr Lys 1 10 15

Ser Pro Tyr Ser Gln Cys Asn Thr

<210> 219

<211> 22

<212> PRT

<213> Homo sapiens

<400> 219

Ser Phe Ser Phe Ser Leu

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<210> 220
<211> 30
<212> PRT
<213> Homo sapiens
<400> 220
Met Ser Pro Gly Arg Val Ser Val Val Ser Leu Gln Gly Ser Gln Leu
Cys Leu Leu Val Ser Ile Ala Ile Met Gly Leu Leu Leu Phe
<210> 221
<211> 34
<212> PRT
<213> Homo sapiens
<400> 221
Met Ser Gly Leu Glu Ser Ala Arg Val Leu Leu Cys Ala Leu Gly Ser
Phe Leu Leu Asn Ser Leu Leu Ser Thr Phe Arg Leu Asn Ser Ser Ala
            20
Pro Ser
<210> 222
<211> 28
<212> PRT
<213> Homo sapiens
<400> 222
Met His Ser Ile Ile Val Lys Glu Leu Ile Val Thr Phe Phe Leu Gly
                                     10
Ile Thr Val Leu Leu Leu Met Gln Arg Ser Leu
             2.0
                                 25
<210> 223
<211> 33
<212> PRT
<213> Homo sapiens
<400> 223
Met Lys Ser Val Ile Phe Ile Gln Ser Val Ile Leu Phe Phe Leu Pro
Met Ser Gly Asp His Gln Gly Ile Ser Gly Leu Asp Glu Leu Pro Gln
             20
```

Ala

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<210> 224
<211> 91
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
Met Val Val Asp Gln Lys Glu Asp Leu Ile Thr Gly Leu Gly Ile Lys
Met Val Arg Lys Trp Leu Gln Gly Ser Gln Ala Trp Pro Leu Glu Arg
Glu Glu Arg Glu Gly Leu Gly Ser Leu Cys Thr Cys Cys Pro Trp Gly
Leu Val Arg Phe Xaa Glu Ser Leu Thr His Phe Thr Gly Glu Ala Ile
Glu Pro Leu Arg Ala Glu Val Thr Asp Pro Lys His Pro Cys Ser Cys
Val Ala Glu Pro Glu Val Lys Ser Arg Ser Leu
                85
<210> 225
<211> 28
<212> PRT
<213> Homo sapiens
<400> 225
Met Leu Ser Leu Asp Phe Pro Leu Ile Leu Leu Gly Leu Asn Leu His
Ile Ala Leu Leu Ser Leu Leu Val Pro Arg Leu Ser
              20
                                 25
<210> 226
<211> 59
<212> PRT
<213> Homo sapiens
<400> 226
Met Val Val Val Ser Thr Asn Gly Phe Leu Leu Leu Leu Leu Phe Leu
Asn Arg Lys Ser Gly Leu Cys Ser Tyr Arg Lys Ala Val His Arg Leu
                                  25
```

Ser Ser Cys Pro Ser Arg His Gln Ala Gly Pro Arg Ile Lys Cys Asp

Phe Lys Trp Gly Lys Leu Cys Tyr Ser Cys Ala

<210> 227

<211> 67

<212> PRT

<213> Homo sapiens

<400> 227

Met Pro Val Tyr Asp Phe Asn Trp Trp Tyr Ser Leu Tyr Phe Ile Ile

Tyr Ile Ile Ile Asn Thr Tyr Ile Phe Lys Ser Val Phe Leu Ala Met

Val Tyr Ser Asn Tyr Arg Lys His Phe His Ile Leu Cys Val Cys Val

Cys Val Phe Cys Ser Asp Glu Gln Asn Leu Leu Phe Thr Gln Phe Tyr 55

Tyr Leu Ser 65

<210> 228

<211> 31 <212> PRT

<213> Homo sapiens

<400> 228

Met Pro Pro Pro Glu Cys Leu Ser Asp Cys Ser Lys Val Ala Leu Val

Met Val Leu Phe Leu Phe Leu His Gln Ser Ser Cys Trp Ala Ala 25

<210> 229

<211> 35

<212> PRT

<213> Homo sapiens

<400> 229

Met Ala Ser Ser Val Thr Val Lys Glu Val Cys Val Leu Phe Asn Leu

Leu Ile Ile Ile Thr Ala Met Val Tyr His Ser Phe Thr Lys Tyr Gln

Thr Leu Phe

35

```
<210> 230
<211> 50
<212> PRT
<213> Homo sapiens
<400> 230
Met Ile Phe Leu Phe Phe Ile Leu Phe Glu Ile Ile Val Thr Leu Trp
Leu Thr Pro Thr Tyr Pro Gln Ala Phe Ser Glu Leu Thr Ile Gln Ile
Thr Ala Pro Phe Gly Ser Leu Pro Gln Gln Leu Tyr Leu His Met Ser
Ile Ile
    50
<210> 231
<211> 53
<212> PRT
<213> Homo sapiens
<400> 231
Met Gln Leu Leu Cys Ser Pro Tyr Pro Glu Glu Lys Pro Lys Gly Ser
Asn Arg Asn Phe Cys Asn Trp Phe Leu Ser Glu Arg Ser Ser Cys Leu
                                 25
Gln Met Leu Lys Gly His Lys Lys Leu Glu Leu Glu Lys Ile Asp
Glu Ser Ala Gly Val
     50
<210> 232
<211> 35
<212> PRT
<213> Homo sapiens
<400> 232
Met His Ile Thr Ser Leu Val Gly Ala Gly Thr Leu Met Val Leu Leu
Leu Leu Ile Leu Leu Glu Cys Phe Phe Val Ala Glu Ala Leu Val
Met Arg Ser
         35
```

<210> 233 <211> 33 <212> PRT <213> Homo sapiens

<400> 233

Met Phe Phe Val Leu Leu Cys Phe Trp Leu Phe Pro Phe Ser Lys Asn 1 5 10 15

Ser Pro Leu Trp Gly Met Leu Arg Ser Ser Phe Phe Ile Ser Ile Asn 20 25 30

Leu

<210> 234

<211> 25 <212> PRT

<213> Homo sapiens

<400> 234

Met Ser Leu Ile Leu Leu Leu Ser Val Thr Leu Leu His Leu Ser Phe 1 5 10 15

Ser Val Gly Phe Phe Leu Phe Arg Leu 20 25

<210> 235

<211> 58

<212> PRT

<213> Homo sapiens

<400> 235

Met Ser Ser Phe Leu Arg Val Ile Phe Ile Pro Asn Ile Lys Val Ile 1 5 10 15

Phe Leu Pro Pro Gly Thr Thr Ser Leu Ile His Thr Met Asp Gln Gly 20 25 30

Val Ile Ala Ala Phe Lys Phe Tyr Tyr Leu Arg Arg Glu Asp Phe Cys $_{35}$ $_{40}$ $_{45}$

Pro Val Pro Tyr Cys Ser Gly Gly Arg His

<210> 236

<211> 75

<212> PRT

<213> Homo sapiens

<220> <221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids <400> 236 Met Lys Pro Thr Leu Ser Lys Phe Leu Gly Thr Asp Ala Glu Leu Pro Lys Leu Tyr Pro Pro Ser Leu Gln Ala Pro Arg Gly Glu Thr Gln Leu Leu Gly Pro Gly Leu Glu Arg Pro Thr Arg Glu Gly Arg Val Glu Gln Met Leu Phe Asn Gln Lys Ser Val Ser Trp Gly Ser Gln Leu Pro Gln Ser Xaa Asn Thr Phe Leu Lys Asn Xaa Asp Pro 65 <210> 237 <211> 42 <212> PRT <213> Homo sapiens <400> 237 Met His Ala Leu Ser Tyr Thr His Leu Ser Leu Leu Ser Leu Phe Leu 5 10 Phe Leu Pro Pro Ser Phe Leu Tyr Tyr Asn Leu Val Ile Leu Phe Phe 20 Glu Ala Phe Gln Asn Ile Ser His Leu Ser <210> 238 <211> 40 <212> PRT <213> Homo sapiens <400> 238 Met Trp Val Gln Leu Ile Phe Phe Phe Val Gln Tyr Gly Asp Ser Leu Thr Ser Ala Phe Phe Pro Phe Ser Ser Asn Phe Ser Leu Gln Asn Ser 25 Gly Phe Ser Met His Lys Leu Lys 35

<210> 239 <211> 38 <212> PRT <213> Homo sapiens

<400> 239

Met Thr Ser Leu Pro Ile Leu Ala Phe Gly Ala Val Tyr Trp Pro Asp

25

His Met Ser Val Ser Gly 35

<210> 240

<211> 47

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 240

DSSYNEY . ACTION

Met Thr Pro Trp Leu Leu Ile Leu Val Ser Xaa Gly Phe Leu Lys Ser

Ile Ser Asp Pro Gln Phe Gln Glu Leu Ser Ile Asn Ile Ala Ser Cys 25

His Pro Gly Thr Val Met Pro Tyr Ser Gly Thr Ser His Leu Lys 40 35

<210> 241

<211> 36

<212> PRT

<213> Homo sapiens

<400> 241

Met Thr Gly Thr Pro Ala Trp Ala His Leu Leu Leu Leu Leu Leu Leu

Gly Ser Ala Pro Gln Thr Arg Leu Trp Pro Pro Ser Gln Cys Pro Val 25

Thr Ser Pro Glu 35

<210> 242

<211> 54

<212> PRT <213> Homo sapiens

<400> 242

Met Val Leu Gln Asn Thr Asn Thr Leu Leu Ile Val Ser Ala Phe Leu

Leu Ser Met Leu Phe Phe Lys Phe Ser Ile Ala Ile Phe Leu Val Thr 25

```
118
Asn Leu Ser Phe Glu Arg Ser Asn Leu Leu Gly Pro Ser Ser Asp
                            40
        35
Leu Phe Leu Asn Phe Lys
<210> 243
<211> 36
<212> PRT
<213> Homo sapiens
<400> 243
Met Tyr Glu Val Asp Lys Lys Ile Tyr Ser Asn Phe Ile Gln Ile Leu
Ile Val Ile Ile Phe Val Leu Tyr Leu Ile Ile Asn Gln Asn Thr Phe
Ala Phe Leu Ser
     3.5
<210> 244
<211> 42
<212> PRT
<213> Homo sapiens
<400> 244
Met Cys Ile Leu Pro Leu Met Leu Thr Tyr Pro Ile Leu Pro Lys Val
Val Gly Asn Asn Ile Leu Leu Gly Asp Ser Gly Leu Thr Ser Leu Val
                                 25
Ile Pro Leu Ser Val Val Phe Asn Leu Lys
                            40
<210> 245
<211> 23
<212> PRT
<213> Homo sapiens
<400> 245
Met Asn Phe Leu Leu Leu Ile Phe Pro Tyr Phe Ser Ser Leu Leu Gly
```

<210> 246 <211> 66 <212> PRT <213> Homo sapiens

Glu Val Glu Val Val Lys Cys

```
119
<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 246
Met Thr Trp Lys Gly Trp Ser Arg Thr Arg Ile Trp Lys Pro Ser Leu
Pro Gln Leu Phe Thr Met Tyr Leu Leu Ala Gln Ile Arg Ala Ala Ser
Arg Ala Ser Glu Asp Ser Cys Ser Tyr Ser Ser Asp Thr Met Trp Pro
Gln Ser Gly Asn Ser Ser Thr Phe Ala Phe Phe Arg Pro Arg Xaa Lys
Met Arg
65
<210> 247
<211> 53
<212> PRT
<213> Homo sapiens
<400> 247
Met Trp His Leu Ser Phe His Cys Leu Leu Leu Leu Pro Leu Cys
Glu Val Thr His Ser Leu Phe Ala Phe Tyr His Asn Trp Lys Leu Phe
Glu Ala Ser Leu Glu Thr Glu Ala Ala Met Leu Pro Val Gln Pro Ala
                             40
Glu Pro Arg Ala Asn
     50
<210> 248
<211> 31
<212> PRT
<213> Homo sapiens
<400> 248
Met Val Ser Leu Asn Leu Ser Leu Pro Asn Asn Ile Ile Ser Leu Val
Phe Phe Phe Leu Leu Gln Pro Val Gln Lys Gly Val Ser Gly Gly
              20
```

<210> 249 <211> 36

<212> PRT <213> Homo sapiens

```
<400> 249
Met Leu Thr Trp Leu Asp Leu Asp Leu Leu Phe Cys Phe Leu Phe Leu
Phe Leu Phe Ile Leu Phe Tyr Phe Leu Gln Leu Asn Glu Phe Trp Gly
                                 25
Gly Asn Pro Phe
        35
<210> 250
<211> 42
<212> PRT
<213> Homo sapiens
<400> 250
Met Arg Lys Glu Glu Gly Ile Ala His Leu Ser Ile Ala Phe Phe Val
Gln Val Leu Cys Leu Tyr Gln Leu Leu Pro Val Ile Leu Pro Gln Phe
Asn Leu Gly Ser Gly Lys Asn Met Asn Arg
<210> 251
<211> 127
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 251
Met Phe Val Leu Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly
Gln Pro Arg Gly Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr
Ile Cys Ser Ile Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala
Asn Gly Ser Pro Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp
Gly Arg Asp Gly Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly
Leu Arg Gly Lys Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp
Gln Gly Glu Thr Gly Lys Lys Gly Pro Ile Gly Pro Glu Gly Glu Lys
             100
```

Gly Glu Val Gly Pro Ile Gly Pro Pro Gly Pro Lys Gly Asp Xaa 115 120 125

```
<210> 252
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<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (136)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (138)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 25

Met Cys Ala Phe Pro Trp Leu Leu Leu Leu Leu Leu Gln Glu Gly
1 5 10 15

Ser Gln Arg Arg Leu Trp Arg Trp Cys Gly Ser Glu Glu Val Val Ala $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Val Leu Gln Glu Ser Ile Ser Leu Pro Leu Glu Ile Pro Pro Asp Glu 35 40 45

Glu Val Glu Asn Ile Ile Trp Ser Ser His Lys Ser Leu Ala Thr Val

Val Pro Gly Lys Glu Gly His Pro Ala Thr Ile Met Val Thr Asn Pro 65 70 75 80

His Tyr Gln Gly Gln Val Ser Phe Leu Asp Pro Xaa Tyr Ser Leu His 85 90 95

Ile Ser Asn Leu Ser Trp Glu Asp Ser Gly Leu Tyr Gln Ala Gln Val 100 \$100\$

Asn Leu Arg Thr Ser Gln Ile Ser Thr Met Gln Gln Tyr Asn Leu Cys 115 120 125

Val Tyr Arg Trp Leu Ser Glu Xaa Pro Xaa His Cys Glu Leu 130 135 140

<211> 142

<212> PRT <213> Homo sapiens

<210> 253

<211> 222

<212> PRT

<213> Homo sapiens

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122
<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 253
Met His Phe Gln Arg Gln Lys Leu Met Ala Val Thr Glu Tyr Ile Pro
Pro Lys Pro Ala Ile His Pro Ser Cys Leu Pro Ser Pro Pro Ser Pro
Pro Gln Glu Glu Ile Gly Leu Ile Arg Leu Leu Arg Arg Glu Ile Ala
Ala Val Phe Gln Asp Asn Arg Met Ile Ala Val Cys Gln Asn Val Ala
Leu Ser Ala Glu Asp Lys Leu Leu Met Arg His Gln Leu Arg Lys His
Lys Ile Leu Met Lys Xaa Phe Pro Asn Gln Val Leu Lys Pro Phe Leu
Glu Asp Ser Lys Tyr Gln Asn Leu Leu Pro Leu Phe Val Gly His Asn
Met Leu Leu Val Ser Glu Glu Pro Lys Val Lys Glu Met Val Arg Ile
                            120
Leu Arg Thr Val Pro Phe Leu Pro Leu Leu Gly Gly Cys Ile Asp Asp
                        135
Thr Ile Leu Ser Arg Gln Gly Phe Ile Asn Tyr Ser Lys Leu Pro Ser
                    150
Leu Pro Leu Val Gln Gly Glu Leu Val Gly Gly Leu Thr Cys Leu Thr
                                    170
Ala Gln Thr His Ser Leu Leu Gln His Gln Pro Leu Gln Leu Thr Thr
                                185
Leu Leu Asp Gln Tyr Ile Arg Glu Gln Arg Glu Lys Asp Ser Val Met
```

200 Ser Ala Asn Gly Lys Pro Asp Pro Asp Thr Val Pro Asp Ser

215

<210> 254 <211> 38 <212> PRT <213> Homo sapiens

<400> 254 Met Met Asn Ile Leu Leu Leu Lys Tyr Ile Leu Glu Ile Leu Ile Leu

Ser Glu Asn Leu Asn Leu Phe Asn Ile Thr Tyr Gly Lys Tyr Asn Leu 20

```
Phe Phe Leu Tyr Arg Tyr
        35
<210> 255
<211> 32
<212> PRT
<213> Homo sapiens
<400> 255
Met Gln Arg Met Leu Val Leu Leu Phe Phe Phe Phe Ser Leu Leu Ala
Ile Asn Pro Ala Glu Thr Ile Cys Gly Tyr Gly Ser Thr Trp Lys Phe
            20
                                 25
<210> 256
<211> 52
<212> PRT
<213> Homo sapiens
<400> 256
Met Pro Ser Leu Asn Leu Val Leu Arg Pro Leu Ile Cys Leu Ala Ser
                                     10
Ile Thr Ser Phe Leu Ile Phe Phe Pro Leu Leu Thr Leu Ile Leu Cys
                                 25
Ser Pro Asn Ser Pro Pro Phe Pro Leu Pro Ala His Pro Glu Arg His
                             40
Thr His Thr Gln
     50
<210> 257
<211> 148
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 257
Met Arg Lys Ile Ala Gln Cys Ala Pro Gly Val Val Glu Leu Val Leu
```

10

Ile Pro Leu Arg Gln Arg Leu Glu Glu Arg Gln Arg Arg Arg Lys Gln

Gly Ala Gly Ser Leu Gln Glu Leu Ala Pro Gln Asp Gly Ser Gly Tyr

Met Asp Val Gly Val Ser Gln Lys Ala Arg Gly Glu Xaa Val Pro Asp

Pro Gln Gly Gly Gln Leu Ser Trp Asp Arg Pro Pro Ala Pro Arg

Pro Pro Ala Tyr Asn Arg Ala Leu Gln Gly Asp Pro Ser Phe Val Leu

Gln Ile Ala Glu Lys Glu Gln Glu Leu Leu Ala Ser Gln Glu Thr Val

Gln Val Leu Gln Met Lys Val Arg Arg Leu Glu His Leu Leu Gln Leu 115

Lys Asn Val Arg Ile Glu Asn Leu Ser Arg Arg Leu Gln Xaa Ala Glu 135

Arg Lys Gln Arg 145

<210> 258 <211> 50

<212> PRT

<213> Homo sapiens

<400> 258

Met Ser Ile Thr Ser Asn Thr Tyr Phe Phe Leu Leu Gly Ala Phe Lys

Ile Leu Ser Ser Ser Tyr Trp Lys Ile His Thr Lys Leu Leu Leu Thr

Ile Val Pro Leu Gln Cys Cys Gly Met Pro Gln Leu Ile Pro Pro Leu

Gln Leu 50

<210> 259

<211> 46 <212> PRT

<213> Homo sapiens

<400> 259

Met Tyr Ile Phe His Phe Val Phe Leu Ile Gly Tyr Ala Met Cys Gly

Ile Gln Val Thr Asn Val Thr Leu Ala Ser Gly Pro Ser Asn Leu His 20 25

Val Tyr Leu Leu Gln Ser Tyr Leu Thr Arg Gly Pro Asn His \$35\$

<210> 260

<211> 79

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 260

Met Arg Val Phe Ala Leu Leu Pro Pro Phe His Lys Ser Thr Val Leu 1 5 10 15

Ser Phe Leu Leu Phe Phe Leu Ser Phe Phe Phe Phe Arg Gln Gly Leu

Ala Val Ser Xaa Arg Leu Glu Cys Ser Gly Ala Ile Ile Ala His Cys 35 40 45

Ser Leu Asp Leu Leu Asp Ser Ser Asn Pro Pro Ala Leu Thr Ser Gln $_{50}$

Leu Leu Arg Arg Pro Arg Gln Glu Asp His Leu Ser Pro Gly Gly 65 70 75

<210> 261

<211> 61

<212> PRT

<213> Homo sapiens

<400> 261

Met Ser Gln Leu Phe Leu Ile Met Leu Thr Phe Ile Phe Leu Asn Asn 1 15

Met Phe Ile Met His Leu Thr Ser Phe His Gly Lys Arg Val Phe Gly

Phe Leu Asn Gln Ser Ser His Met His Ala Phe Pro Leu Pro Arg Trp $_{35}$ $_{40}$ $_{45}$

Thr Thr Ser Ile Phe Ser Val Ser Ile Phe Ile Asn Arg

<210> 262

<211> 10

<212> PRT

<213> Homo sapiens

<400> 262

Met Ala Tyr Ala Phe His Arg Thr Ser Thr

```
<210> 263
<211> 15
<212> PRT
<213> Homo sapiens
```

Met Ser His Cys Ala Trp Leu His Leu Gln Leu Phe Leu Ser Leu 1 5 10 15

<210> 264 <211> 20 <212> PRT <213> Homo sapiens

Val Glu Met Ile 20

<210> 265 <211> 51 <212> PRT <213> Homo sapiens

<400> 265
Met Ala Val Pro Ser Gly Cys Trp Pro Ser Trp Pro Arg Pro Ser Ser
1 5 10 15

Trp Trp Ser Thr Arg Ile Ser Pro Arg Ser Ala Thr Pro Leu Thr Ala $_{\rm 20}$ $_{\rm 25}$ $_{\rm 30}$

Ser Thr Trp Ser Leu Val Thr Cys Ser Ser Gln Val Ser Ala Cys Gly

Thr Ser Ile

<210> 266 <211> 61 <212> PRT <213> Homo sapiens

 $<\!400>$ 266 Met Ser Asn Leu Gln Phe His Leu Leu Pro His Ser Ser Pro Ile Leu 1 5 10 15

Pro Leu Phe Thr Leu Ala Leu Leu Lys Met Gln Ile Pro Gly Leu Arg

Leu Ser His Cys Leu Leu Thr Tyr Asn Ser Tyr Thr Arg Thr Pro Phe 35 40 45

Leu Leu Pro Ser Ser Glu Ser Tyr Leu Val Phe Glu Ile 50 55 60

<210> 267

<211> 209

<212> PRT <213> Homo sapiens

<400> 267

Met Cys Pro Leu Trp Arg Leu Leu Ile Phe Leu Gly Leu Leu Ala Leu 1 5 10 15

Pro Leu Ala Pro His Lys Gln Pro Trp Pro Gly Leu Ala Gln Ala His $20 \hspace{1cm} 25 \hspace{1cm} 30$

Arg Asp Asn Lys Ser Thr Leu Ala Arg Ile Ile Ala Gln Gly Leu Ile 35 40 45

Lys His Asn Ala Glu Ser Arg Ile Gln Asn Ile His Phe Gly Asp Arg 50 $\,$ 55 $\,$ 60 $\,$

Leu Asn Ala Ser Ala Gln Val Ala Pro Gly Leu Val Gly Trp Leu Ile 65 70 75 80

Ser Gly Arg Lys His Gln Gln Gln Gln Glu Ser Ser Ile Asn Ile Thr $85 \hspace{0.5cm} 90 \hspace{0.5cm} 95$

Asn Ile Gln Leu Asp Cys Gly Gly Ile Gln Ile Ser Phe His Lys Glu 100 105 110

Trp Phe Ser Ala Asn Ile Ser Leu Glu Phe Asp Leu Glu Leu Arg Pro $115 \ \ 120 \ \ 125$

Ser Phe Asp Asn Asn Ile Ile Lys Met Cys Ala His Met Ser Ile Val 130 $$135\$

Val Glu Phe Trp Leu Glu Lys Asp Glu Phe Gly Arg Arg Asp Leu Val 145 $$ 150 $$ 155 $$ 160

Ile Gly Lys Cys Asp Ala Glu Pro Ser Ser Val His Val Ala Ile Leu \$165\$ 170 175

Thr Glu Ala Ile Pro Pro Lys Met Asn Gln Phe Leu Tyr Asn Leu Lys 180 180

Glu Asn Leu Gln Lys Val Leu Pro His Met Val Glu Ser Gln Pro Leu 195 200 205

Ala

<210> 268

<211> 74

<212> PRT

<213> Homo sapiens

<400> 268

Met Gly His Leu Phe Val Val Cys Leu Leu Ser Ser Trp Trp Thr Phe

Arg Pro Phe Ala Leu Ala Val Thr Val Asn His Val Ala Val Asn Ile

Val Cys Val Ser Ala Trp Thr Cys Val Ser Cys Ser Leu Gly Arg Ser

Cys Gly Leu Glu Gly Ser Phe Leu Phe Pro Leu Glu Thr Leu Trp Phe

Pro His Met Val Val Leu Cys Leu Thr Phe

<210> 269

<211> 34

<212> PRT <213> Homo sapiens

<400> 269

Met Gly Trp Gly Lys Glu Val Val Ser Leu Ile Val Leu Leu Val Asn 10

Leu Phe Leu Cys Pro Trp Ala Leu Gly Leu Cys Leu Leu Ser Val Ser 20 25

Ser Leu

<210> 270

<211> 58 <212> PRT

<213> Homo sapiens

<400> 270

Met Glu Pro Trp Ser Trp Phe Phe Phe Phe Phe Phe Phe Phe Pro Gln

Arg Thr Cys Gly Cys Ala Leu Cys Val Leu Phe Leu Phe Ser Ile Trp 25

Gly Pro His Gly Lys Glu Leu Leu Asn Ser Phe Leu Tyr Glu Leu Pro

Leu Cys Ser Tyr Lys Gly Pro Phe Leu Ser

<210> 271

<211> 96

<212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (83)
<223> Kaa equals any of the naturally occurring L-amino acids
<400> 271
Met Cys Phe Ile Leu Val Val Cys Phe Ala Ser Leu Ile Thr Glu Cys
Pro Cys His Cys Lys Cys Cys Arg Asp Val Gly Arg Gly Xaa Thr Val
Leu Tyr Xaa Cys Ser Met Val Gln Asn Lys Leu Leu Thr Gln Val Ser
Leu Val Arg Asn Leu Trp Ala Met Glu Val Arg His Pro Ser Cys Xaa
                         55
Ser Ile Gly Lys Lys Cys Phe Gln Ile Leu Trp Lys Gly Gly His Gly
Ala Gly Xaa Trp Arg Val Ala Phe Glu Gln Ser Asp Pro Ile Ser Val
<210> 272
<211> 405
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (273)
<223> Xaa equals any of the naturally occurring L-amino acids
<400× 272
Met Leu Leu Trp Val Ser Val Val Ala Ala Leu Ala Leu Ala Val
Leu Ala Pro Gly Ala Gly Glu Gln Arg Arg Arg Ala Ala Lys Ala Pro
```

- Asn Val Val Leu Val Val Ser Asp Ser Tyr Asp Gly Arg Leu Thr Phe 35 40 45
- His Pro Gly Ser Gln Val Val Lys Leu Pro Phe Ile Asn Phe Met Lys 50 55 60
- Thr Arg Gly Thr Ser Phe Leu Asn Ala Tyr Thr Asn Ser Pro Ile Cys 65 70 75 80
- Cys Pro Ser Arg Ala Ala Met Trp Ser Gly Leu Phe Thr His Leu Thr 85 90 95
- Glu Ser Trp Asn Asn Phe Lys Gly Leu Asp Pro Asn Tyr Thr Thr Trp
- Met Asp Val Met Glu Arg His Gly Tyr Arg Thr Gln Lys Phe Gly Lys $115 \\ 120 \\ 125$
- Leu Asp Tyr Thr Ser Gly His His Ser Ile Ser Asn Arg Val Glu Ala 130 135 140
- Trp Thr Arg Asp Val Ala Phe Leu Leu Arg Gln Glu Gly Arg Pro Met 145 $$ 150 $$ 150 Leu Leu 5 Gln Glu Gly Arg Pro Met 145
- Val Asn Leu Ile Arg Asn Arg Thr Lys Val Arg Val Met Glu Arg Asp 165 170 175
- Trp Gln Asn Thr Asp Lys Ala Val Asn Trp Leu Arg Lys Glu Ala Ile 180 \$180\$
- Asn Tyr Thr Glu Pro Phe Val Ile Tyr Leu Gly Leu Asn Leu Pro His
- Pro Tyr Pro Ser Pro Ser Ser Gly Glu Asn Phe Gly Ser Ser Thr Phe 210 215 220
- His Thr Ser Leu Tyr Trp Leu Glu Lys Val Ser His Asp Ala Ile Lys 225 235 240
- Ile Pro Lys Trp Ser Pro Leu Ser Glu Met His Pro Val Asp Tyr Tyr 245 255
- Ser Ser Tyr Thr Lys Asn Cys Thr Gly Arg Phe Thr Lys Lys Glu Ile 260 265 270
- Xaa Asn Ile Arg Ala Phe Tyr Tyr Ala Met Cys Ala Glu Thr Asp Ala 275 280 285
- Met Leu Gly Glu Ile Ile Leu Ala Leu His Gln Leu Asp Leu Leu Gln 290 295 300
- Lys Thr Ile Val Ile Tyr Ser Ser Asp His Gly Glu Leu Ala Met Glu 305 $$ 310 $$ 315 $$ 320
- His Arg Gln Phe Tyr Lys Met Ser Met Tyr Glu Ala Ser Ala His Val 325 330 335
- Pro Leu Met Met Gly Pro Gly Ile Lys Ala Gly Leu Gln Val Ser 340 345 350

Asn Val Val Ser Leu Val Asp Ile Tyr Pro Thr Met Leu Asp Ile Ala 355 360 365

Gly Ile Pro Leu Pro Gln Asn Leu Ser Gly Tyr Ser Ser Leu Pro Leu 370 375 380

Ser Ser Glu Thr Phe Lys Asn Glu His Lys Val Lys Asn Leu His Pro 385 390 395 400

Pro Trp Ile Thr Glu

<210> 273 <211> 80

<211> 80 <212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE <222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 273

Met Phe Leu Thr Ile Ile Val Cys Gly Met Val Ala Ala Leu Ser Ala 1 5 10 15

Ile Arg Ala Asn Cys His Gln Glu Pro Ser Val Cys Leu Gln Ala Ala 20 \$25\$

Cys Pro Glu Ser Trp Ile Gly Phe Gln Arg Lys Cys Phe Tyr Phe Ser $\frac{35}{40}$

Asp Asp Thr Lys Asn Trp Thr Ser Ser Gln Arg Phe Cys Asp Ser Gln 50

Asp Ala Asp Leu Ala Gln Val Glu Xaa Phe Gln Glu Leu Xaa Arg Lys 65 70 75 80

<210> 274

<211> 14

<212> PRT

<213> Homo sapiens

<400> 274

Ala Ser Ser Leu Leu Val Ser Leu Gln Cys Leu Leu Gln Leu

```
<210> 275
<211> 47
<212> PRT
<213> Homo sapiens
<400> 275
Met Leu Pro Ile His Leu Gln Trp Ala Cys Ala Phe Arg Ser Phe Leu
Leu Gly Ile Asp Ser Ser Met Phe Val Leu Phe Gln His Pro Arg Leu
Lys Asp Thr Lys Ser Ser Arg Val Ile Glu Pro Thr Leu Thr Asn
                             40
<210> 276
<211> 35
<212> PRT
<213> Homo sapiens
<400> 276
Met Ile Val Ile Thr Ser Ile Leu Ser Ser Leu Ala Ser Leu Leu Leu
Leu Ala Phe Leu Ala Ala Ser Thr Ala Arg Leu Ser Pro Gln Ser Leu
                                  25
Pro Glu Thr
         35
<210> 277
<211> 281
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
 <222> (199)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (227)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
 <222> (276)
 <223> Xaa equals any of the naturally occurring L-amino acids
 Met Gly Phe Pro Gln Arg Gln Pro Gly Leu Ser Gly Leu Leu Leu Leu
```

Val Trp Ala Leu Ala Trp Pro Leu Pro Cys Met Ser Leu Glu Leu Ile 20 25 30

Pro Tyr Thr Pro Gln Ile Thr Ala Trp Asp Leu Glu Gly Lys Val Thr 35 40 45

Ala Thr Thr Phe Ser Leu Glu Gln Pro Arg Cys Val Leu Asp Gly Leu 50 55 60

Xaa Gly Val Ala Ser Thr Ile Trp Leu Val Val Ala Phe Ser Asn Ala 65 70 75 80

Ser Arg Asp Phe Gln Asn Pro Gln Thr Arg Ala Glu Ile Pro Ala Phe 85 90 95

Pro Arg Leu Leu Thr Glu Gly His Tyr Met Thr Leu Pro Leu Ser Leu $100 \hspace{1.5cm} 105 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

Asp Gln Leu Pro Cys Gln Asp Pro Ala Gly Gly Gly Arg Asp Val Pro

Leu Leu Arg Val Gly Asn Asp Pro Gly Cys Leu Ala Asp Leu Leu Gln

Lys Phe Leu Leu Met Asp Ala Arg Gly Ser Pro Gln Ala Glu Thr Arg 165 $$170\$

Trp Ser Asp Pro Ile Ala Leu His Gln Gly Lys Ser Pro Ala Ser Ile $180 \ \ 185 \ \ 190$

Asp Thr Trp Pro Gly Arg Xaa Ser Gly Gly Met Ile Val Ile Thr Ser 195 200 205

Ile Leu Ser Ser Leu Ala Ser Leu Leu Leu Leu Ala Phe Leu Ala Ala 210 215 220

Ser Thr Xaa Arg Phe Ser Ser Leu Trp Trp Pro Glu Glu Ala Pro Glu 225 230 235 240

Gln Leu Arg Ile Gly Ser Phe Met Gly Lys Arg Tyr Met Thr His His 245 250 255

Ile Pro Pro Ser Glu Ala Ala Thr Leu Pro Val Gly Cys Glu Pro Gly $260 \hspace{1cm} 265 \hspace{1cm} 270 \hspace{1cm}$

Leu Asp Pro Xaa Pro Ser Leu Ser Pro 275 280

<210> 278

<211> 45

<212> PRT

<213> Homo sapiens

<400> 278

```
Met Pro Arg Arg Ser Arg Pro Cys Thr Leu Cys Leu Thr Leu Leu Arg 1 5 15

Arg Ala Leu Ser Ser His Leu Pro Ser Ala Cys Gln Ser Pro Arg Arg 20 25 30

Arg Val Gln Gly Gln Val Leu Lys Arg Leu Lys Pro Leu 40 45
```

<211> 10
<212> PRT
<213> Homo sapiens
<400> 279
Met Ser Arg Arg Glu Asn Lys Phe Leu Leu
1 5 10

<210> 280 <211> 39 <212> PRT <213> Homo sapiens

<210> 279

<400> 280
Met Pro Leu Thr Leu Pro Ser Arg Leu Ala Gly Gly Asn Val Phe Leu
1 5 10 15
Ile Ile Phe Thr Pro Gly Phe Cys Pro Gly Arg Val Asn Val Glu Ile

25

Pro Gln Arg Met Leu Asp Glu

<210> 281 <211> 67 <212> PRT <213> Homo sapiens

Thr Ile Trp Trp Ser Thr Val Gly Leu Pro Trp Thr Ser Ser Thr Gln $_{\rm 20}$ $_{\rm 25}$ $_{\rm 30}$

Arg Glu Leu Asp Met Lys Leu Glu Ala Ala Leu Glu Gly Lys Phe $35 \hspace{1cm} 40 \hspace{1cm} 45$

Arg Leu Thr Trp Thr Ala Gln Ala Met Ala Gly Arg Ile Pro Ser Ser 50 55 60

Trp Gly Pro

```
<210> 282
<211> 22
<212> PRT
<213> Homo sapiens
<400> 282
Met Ile Leu Leu Ala Phe Phe Ile Leu Leu Tyr Leu Thr Ser Phe Ser
Leu Ala Arg Ser Leu Pro
             2.0
<210> 283
<211> 26
<212> PRT
<213> Homo sapiens
<400> 283
Met Glu Ala Val Phe Phe Leu Phe Phe Leu Leu Leu Leu Leu Thr Trp
Thr Ser Lys Ile Ala Pro Ile Leu Phe Ser
             20
<210> 284
<211> 122
<212> PRT
<213> Homo sapiens
<400> 284
Met Gln Ala Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu
Pro Ser Arg Trp Asp Tyr Gly Cys Ala Thr Gln His Pro Ala Asn Phe
Cys Ile Phe Arg Arg Asp Arg Val Ser His Val Gly Gln Ala Gly Leu
Lys Leu Leu Thr Ser Val Asp Pro Pro Ala Trp Ala Ser Gln Ser Ala
Gly Ile Thr Gly Lys Ser His Cys Ala Gln Leu His Cys Cys Cys Phe
Leu Leu Leu Val Lys Arg Asp Gln Pro Leu Glu Lys Cys Leu Arg Leu
Phe Lys Gly Arg Ile Leu Cys Arg Gln Pro His Tyr Arg Leu Leu Ser
                                 105
                                                     110
```

Asp Glu Cys Pro Gly Leu Leu Gln Asn Pro

120

```
<210> 285
<211> 26
<212> PRT
<213> Homo sapiens
<400> 285
Met Ile His Leu Ser Arg Phe Tyr Leu Leu Leu Ile Met Leu Pro His
Val Leu Phe Phe Thr Gly Asp Leu His Ser
<210> 286
<211> 7
<212> PRT
<213> Homo sapiens
<400> 286
Met Tyr Lys Cys Trp Tyr Arg
1
<210> 287
<211> 28
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 287
Met Xaa Leu Asn Lys Thr Lys Ser Leu Thr Leu Leu Glu Leu Val Phe
Leu Pro Gly Glu Thr Val Ser Lys Pro Ser Thr Lys
             20
<210> 288
<211> 56
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
 <400> 288
 Met His Arg Leu Trp Ile Gly Pro Ala Phe Phe Leu Met Thr Ser Leu
 Ser Val Ser Gly Ala Val Ile Pro Arg Asn Gly Gly Pro Gly Gly Val
                                 25
```

137 Ser Ser Gly Pro Cys Leu Leu Gln Leu Leu Cys Gly Gln Ala Gly Ser 35 Ser Thr Ile Arg Xaa Ile Pro Ser

<210> 289 <211> 36 <212> PRT <213> Homo sapiens

<400> 289 Met Cys Phe Ile Leu Val Val Cys Phe Ala Ser Leu Ile Thr Glu Cys

Pro Cys His Cys Lys Cys Cys Arg Asp Val Gly Arg Gly Pro Thr Val

Leu Tyr Glu Met 35

<210> 290 <211> 20 <212> PRT <213> Homo sapiens

<400> 290 Ser Ser Ser Cys Met Pro Arg Lys Leu Asp Trp Phe Ser Lys Lys Val

Phe Leu Phe Phe 20

<210> 291 <211> 122 <212> PRT <213> Homo sapiens

<400> 291 Leu Arg Arg Pro Ser Thr Pro Leu Arg Arg Pro Trp Leu His Leu Gln

Leu Pro Arg Ile Ser Leu Gly Asp Gln Arg Leu Ala Gln Ser Ala Glu 25

Met Tyr His Tyr Gln His Gln Arg Gln Gln Met Leu Ser Leu Glu Arg

His Lys Glu Pro Pro Lys Glu Leu Asp Thr Ala Leu Arg Met Arg Arg

Met Arg Thr Glu Thr Ser Arg Cys Thr Ser Ala Arg Ala Trp Pro Arg 75

Pro Gly Lys Trp Arg Cys Ala Thr Ile Cys Ser Thr Thr Pro His Cys

Pro Arg Pro Cys Arg Pro Pro Ala His Arg Leu His Cys His Asp Leu 100 105 110

Glu Ala Asp Arg Arg Pro Leu Ala Pro Arg 115 120

<210> 292

<211> 60

<212> PRT

<213> Homo sapiens

<400> 292

Arg Ala Thr Gln Gly Ala Gly His Gly Ser Ser Asp Glu Glu Asn Glu

Asp Gly Asp Phe Thr Val Tyr Glu Cys Pro Gly Met Ala Pro Thr Gly $20 \\ 25 \\ 30$

Glu Met Glu Val Arg Asn His Leu Phe Asp His Ala Ala Leu Ser Ala 35 40 45

Pro Leu Pro Ala Pro Ser Ser Pro Leu Ala Leu Pro 50 55 60

<210> 293

<211> 47

<212> PRT

<213> Homo sapiens

 $^{<400>}$ 293 Lys Ala Glu Tyr Ala Thr Ala Lys Ala Leu Ala Thr Pro Ala Ala Thr 1 5 10 10

Pro Asp Leu Ala Trp Gly Pro Ala Pro Gly Thr Glu Arg Gly Asp Val 20 25 30

Pro Leu Pro Ala Pro Thr Ala Thr Asp Val Val Pro Gly Ala Ala 35 40 45

<210> 294

<211> 15

<212> PRT

<213> Homo sapiens

<400> 294

Ser Ala Glu Met Tyr His Tyr Gln His Gln Arg Gln Gln Met Leu 1 5 10 15

<210> 295

<211> 11

<212> PRT

```
<213> Homo sapiens
<400> 295
Leu Glu Arg His Lys Glu Pro Pro Lys Glu Leu
                 5
<210> 296
<211> 12
<212> PRT
<213> Homo sapiens
<400> 296
Ala Lys Cys Pro Pro Gly Ala His Ala Cys Gly Pro
          5
<210> 297
<211> 9
<212> PRT
<213> Homo sapiens
<400> 297
Pro Val His Met Ser Pro Leu Glu Pro
 1
<210> 298
<211> 12
<212> PRT
<213> Homo sapiens
<400> 298
Trp Cys Arg Leu Gln Arg Glu Ile Arg Leu Thr Gln
<210> 299
 <211> 18
 <212> PRT
 <213> Homo sapiens
 <400> 299
 Ser Ser Asp Glu Glu Asn Glu Asp Gly Asp Phe Thr Val Tyr Glu Cys
                  5
                                     10
  1
 Pro Gly
 <210> 300
 <211> 10
 <212> PRT
 <213> Homo sapiens
 <400> 300
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Ala Pro Thr Gly Glu Met Glu Val Arg Asn
<210> 301
<211> 10
 <212> PRT
 <213> Homo sapiens
 <400> 301
 Cys Pro Gly Ser Leu Asp Cys Ala Leu Lys
<210> 302
<211> 22
 <212> PRT
 <213> Homo sapiens
 <400> 302
 Asn Glu Asp Gly Asp Phe Thr Val Tyr Glu Cys Pro Gly Met Ala Pro
 Thr Gly Glu Met Glu Val
              20
 <210> 303
 <211> 159
 <212> PRT
 <213> Homo sapiens
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 <221> SITE
 <222> (114)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (123)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (129)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
  <222> (136)
 <223> Xaa equals any of the naturally occurring L-amino acids
<400> 303
  Arg Pro Thr Arg Pro Ser Ser Ser Cys Val Leu Pro Arg Cys Leu Arg
                                       1.0
  Cys Ser Arg Arg Gly Ala Arg Ser Pro Arg Arg Ala Pro Gly Leu Ala
               20
                                   25
```

Val Pro Cys Cys Pro Gly Gly Gly Ala Glu Gly Trp Arg Arg Cys 35 40 45

Leu Arg Pro Pro Arg Gly Thr Cys Gly Cys Cys Gly Cys Cys Ser Pro

Ala Ser Ser Ser Ala Pro Pro Cys Val Glu Pro Pro Pro Ala Thr Arg 65 70 75 80

Asn Val Ala Ala Cys Pro Gly Ser Leu Asp Cys Ala Leu Lys Lys Arg 85 90 95

Ala Ser Val Leu Leu Val His Met Pro Val Gly Leu Pro Ser Ala Leu 100 105 110

Pro Xaa Gly Thr Ala Lys Ala Cys Phe Ala Xaa Met Arg Arg Ala Ser 115 120 125

Xaa Gly Gly Arg Ala Gln Pro Xaa Leu Glu Met Arg Leu Ile Pro Gly 130 135

Pro Arg Glu Leu Ala Arg Lys Gly Ile Trp Thr Ser Ile Pro Pro 145 150 155

<210> 304

<211> 25

<212> PRT <213> Homo sapiens

 $^{<400>}$ 304 Arg Cys Leu Arg Cys Ser Arg Arg Gly Ala Arg Ser Pro Arg Arg Ala $_{\rm 1}$ $_{\rm 5}$ $_{\rm 10}$

Pro Gly Leu Ala Val Pro Cys Cys Pro 20 25

<210> 305

<211> 34

<212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 305

Gly Ser Leu Asp Cys Ala Leu Lys Lys Arg Ala Ser Val Leu Leu Val 1 5 10 15

His Met Pro Val Gly Leu Pro Ser Ala Leu Pro Xaa Gly Thr Ala Lys

Ala Cys

```
<210> 306
<211> 25
<212> PRT
<213> Homo sapiens
<400> 306
Asp Ser His Gln Ala Arg Ser Arg Arg Leu Glu Ala Leu Trp Ser Pro
                             10
Ser Leu Gly Glu Val Ser Ser Ser Thr
             20
<210> 307
<211> 11
<212> PRT
<213> Homo sapiens
<400> 307
Cys Arg Trp Arg Pro Glu Ser Ala Ala Pro Cys
 1
<210> 308
<211> 12
<212> PRT
<213> Homo sapiens
<400> 308
Thr Arg Pro Gly Arg Gly Ala Gln Ala Pro Val Lys
<210> 309
<211> 21
<212> PRT
<213> Homo sapiens
<400> 309
Met Val Ser Trp Met Ile Ser Arg Ala Val Val Leu Val Phe Gly Met
                                     10
Leu Tyr Pro Ala Tyr
             2.0
<210> 310
<211> 17
<212> PRT
<213> Homo sapiens
<400> 310
 Gly Met Leu Tyr Pro Ala Tyr Tyr Ser Tyr Lys Ala Val Lys Thr Lys
                                     10
```

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<210> 311
<211> 17
<212> PRT
<213> Homo sapiens
<400> 311
Glu Tyr Val Arg Trp Met Met Tyr Trp Ile Val Phe Ala Leu Tyr Thr
                                     10
Val
<210> 312
<211> 17
<212> PRT
<213> Homo sapiens
<400> 312
Tyr Pro Ala Tyr Tyr Ser Tyr Lys Ala Val Lys Thr Lys Asn Val Lys
Glu
<210> 313
<211> 13
<212> PRT
<213> Homo sapiens
<400> 313
Val Ala Trp Phe Pro Leu Tyr Tyr Glu Leu Lys Ile Ala
  1
                  5
<210> 314
<211> 186
<212> PRT
<213> Homo sapiens
<220>
 <221> SITE
 <222> (181)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 314
Met Val Ser Trp Met Ile Ser Arg Ala Val Val Leu Val Phe Gly Met
Leu Tyr Pro Ala Tyr Tyr Ser Tyr Lys Ala Val Lys Thr Lys Asn Val
                                  25
```

Lys Glu Tyr Val Arg Trp Met Met Tyr Trp Ile Val Phe Ala Leu Tyr

Thr Val Ile Glu Thr Val Ala Asp Gln Thr Val Ala Trp Phe Pro Leu 50 60

Tyr Tyr Glu Leu Lys Ile Ala Phe Val Ile Trp Leu Leu Ser Pro Tyr 65 70 75 80

Thr Lys Gly Ala Ser Leu Ile Tyr Arg Lys Phe Leu His Pro Leu Leu 85 90 95

Ser Ser Lys Glu Arg Glu Ile Asp Asp Tyr Ile Val Gln Ala Lys Glu 100 105 110

Arg Gly Tyr Glu Thr Met Val Asn Phe Gly Arg Gln Gly Leu Asn Leu 115 120 125

Ala Ala Thr Ala Ala Val Thr Ala Ala Val Lys Ser Gln Gly Ala Ile 130 135 140

Thr Glu Arg Leu Arg Ser Phe Ser Met His Asp Leu Thr Thr Ile Gln 145 $\,$ 150 $\,$ 155 $\,$ 160

Gly Asp Glu Pro Val Gly Gln Arg Pro Tyr Gln Pro Leu Pro Glu Ala 165 170 175

Lys Lys Lys Ser Xaa Gln Pro Pro Val Asn 180 185

<210> 315 <211> 12 <212> PRT

<213> Homo sapiens

<400> 315
Ile Thr Leu Cys Leu Val Cys Ile Val Ala Asn Ala
1 5 10

<210> 316 <211> 20

<212> PRT <213> Homo sapiens

<400> 316

Met Ala Ile Pro Ala Phe Ser Ser Cys Gln Gln Ile Ser Ser Ala Ala 1 $$ 5 $$ 10 $$ 15

Ala Leu Gln Ile 20

<210> 317

<211> 14

<212> PRT

<213> Homo sapiens

```
<400> 317
Cys Asn Gly Pro Phe Lys His Phe Ser Phe Thr Val Ser Thr
 1
<210> 318
<211> 8
<212> PRT
<213> Homo sapiens
<400> 318
Arg Ser Cys Lys Glu Ile Lys Asp
 1
<210> 319
<211> 13
<212> PRT
<213> Homo sapiens
<400> 319
Gly Gly Gly Trp Thr Leu Val Ala Ser Val His Glu Asn
<210> 320
<211> 19
<212> PRT
<213> Homo sapiens
Ala Asp Tyr Pro Glu Gly Asp Gly Asn Trp Ala Asn Tyr Asn Thr Phe
                                     10
Gly Ser Ala
<210> 321
<211> 14
<212> PRT
<213> Homo sapiens
<400> 321
Ala Thr Ser Asp Asp Tyr Lys Asn Pro Gly Tyr Tyr Asp Ile
<210> 322
<211> 11
<212> PRT
<213> Homo sapiens
<400> 322
Cys Ile Gly Gly Gly Tyr Phe Pro Glu Ala
```

```
10
```

```
<210> 323
<211> 11
<212> PRT
<213> Homo sapiens
<400> 323
Glu Ile Thr Glu Ala Ala Val Leu Leu Phe Tyr
 1 5
<210> 324
<211> 6
<212> PRT
<213> Homo sapiens
<400> 324
Asp Ser Asp Lys Ile Thr
 1
<210> 325
<211> 8
<212> PRT
<213> Homo sapiens
 <400> 325
 Tyr Gln Thr Phe Cys Asp Met Thr
```

```
<210> 326
<211> 57
```

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<212> PRT

<213> Homo sapiens

Met Met Ala Thr Pro Ser Thr Arg Pro Pro Pro Pro Ala Ala Ser Thr 10

Thr Ser Ala Thr Ala Pro Ala Leu Pro Pro Arg Pro Pro Trp Pro Trp 25

Pro Pro Ser Ser Trp Pro Pro Ser Gly Val Ser Ser Lys Ala Pro Glu 40

Ala Asp Pro Leu Lys Asn Lys Ala Leu 50

<210> 327

<211> 76

<212> PRT

<213> Homo sapiens

```
<400> 327
Leu Leu Leu Thr Ser Pro Leu Pro Arg Cys Pro Pro Ala Cys Ser His
                                     10
Asp Ala Pro Ala His Pro Asp Pro Gly Gly Pro His Gly Leu Thr Ser
Gly Pro Gly Leu Gly Leu Pro Arg Val Cys Leu Gln Arg Arg Gln Leu
Leu Gln Pro His Ala Leu Pro Gly Tyr Gly Cys Leu Leu His Asp His
Ala His Leu Leu His Pro His Gln Asp Glu Gly Gln
                     70
<210> 328
<211> 56
<212> PRT
<213> Homo sapiens
<400> 328
Trp Leu Leu Gln Ala Arg Val His His Leu Leu Leu Pro Val Arg Pro
Leu Gln Arg His Arg Pro Cys His Pro Gly His Pro Gly Pro Gly Pro
His Pro Pro Gly His Pro Leu Gly Ser Pro Leu Lys Pro Pro Arg Gln
         35
Thr His Ser Arg Thr Lys Leu Ser
     50
<210> 329
<211> 300
<212> PRT
<213 > Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 329
Lys His Glu Xaa His Gln Val Ser Asp Gly Ala Leu Arg Cys Phe Ala
Ser Leu Ala Asp Arg Phe Thr Arg Arg Gly Val Asp Pro Ala Pro Leu
```

25

- Ala Lys His Gly Leu Thr Glu Glu Leu Leu Ser Arg Met Ala Ala Ala 35 40
- Gly Gly Thr Val Ser Gly Pro Ser Ser Ala Cys Lys Pro Xaa Arg Ser 50 $\,$ 55 $\,$ 60 $\,$
- Thr Thr Gly Ala Pro Ser Thr Thr Ala Asp Ser Lys Leu Ser Asn Gln 65 70 75 80
- Val Ser Thr Ile Val Ser Leu Leu Ser Thr Leu Cys Arg Gly Ser Pro
- Val Val Thr His Asp Leu Leu Arg Ser Glu Leu Pro Asp Ser Ile Glu
- Ser Ala Leu Gln Gly Asp Glu Arg Cys Val Leu Asp Thr Met Arg Leu
- Val Asp Phe Leu Leu Val Leu Leu Phe Glu Gly Arg Lys Ala Leu Pro 130 140
- Lys Ser Ser Ala Gly Ser Thr Gly Arg Ile Pro Gly Leu Arg Arg Leu 145 \$150\$
- Asp Ser Ser Gly Glu Arg Ser His Arg Gln Leu Ile Asp Cys Ile Arg 165 \$170\$
- Ser Lys Asp Thr Asp Ala Leu Ile Asp Ala Ile Asp Thr Gly Ala Phe $180 \,$ $185 \,$ $190 \,$
- Glu Val Asn Phe Met Asp Asp Val Gly Gln Thr Leu Leu Asn Trp Ala 195 200200
- Ser Ala Phe Gly Thr Gln Glu Met Val Glu Phe Leu Cys Glu Arg Gly 210 215 220
- Ala Asp Val Asn Arg Gly Gln Arg Ser Ser Ser Leu His Tyr Ala Ala 225 230235235
- Cys Phe Gly Arg Pro Gln Val Ala Lys Thr Leu Leu Arg His Gly Ala $_{245}$ $_{250}$ $_{250}$
- Asn Pro Asp Leu Arg Asp Glu Asp Gly Lys Thr Pro Leu Asp Lys Ala 260 265 270
- Arg Glu Arg Gly His Ser Glu Val Val Ala Ile Leu Gln Ser Pro Gly 275 280 . 285
- Asp Trp Met Cys Pro Val Asn Lys Gly Asp Asp Lys 290 295 300

<210> 330

<211> 17

<212> PRT

<213> Homo sapiens

<400> 330

Pro Leu Asp Lys Ala Arg Glu Arg Gly His Ser Glu Val Val Ala Ile

```
<210> 331
<211> 15
<212> PRT
<213> Homo sapiens
<400> 331
Ala Lys Thr Leu Leu Arg His Gly Ala Asn Pro Asp Leu Arg Asp
<210> 332
<211> 54
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 332
Gly Arg Gly Arg Ala Trp Leu Cys Arg Arg Pro Val Gly Ser Trp Ile
Gly Ala Val Trp Asn Asp Lys Pro Asp Lys Glu Thr Phe Lys Lys Pro
             20
Trp Gln Met Trp Thr Gln Ile His Cys Trp Asn Gly Tyr Arg Trp Asp
                             40
Xaa Xaa Asp Xaa Lys Asp
     50
<210> 333
<211> 23
<212> PRT
<213> Homo sapiens
<400> 333
Ser Trp Ile Gly Ala Val Trp Asn Asp Lys Pro Asp Lys Glu Thr Phe
                                      10
```

Lys Lys Pro Trp Gln Met Trp 20

<210> 334 <211> 30 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 334

Lys Thr Met Ala Asp Val Asp Pro Asp Thr Leu Leu Glu Trp Leu Gln

Met Gly Xaa Gly Arg Xaa Lys Gly His Ala Thr Asn Thr Pro 20 25 30

<210> 335 <211> 34

<212> PRT

<213> Homo sapiens

<400> 335

Arg Gly Val Asp Pro Ala Pro Leu Ala Lys His Gly Leu Thr Glu Glu 1 1 5 15

Ser Ala

<210> 336

<211> 31

<212> PRT

<213> Homo sapiens

<400> 336

Asn Gln Val Ser Thr Ile Val Ser Leu Leu Ser Thr Leu Cys Arg

```
<211> 34
<212> PRT
<213> Homo sapiens
<400> 337
Phe Glu Val Asn Phe Met Asp Asp Val Gly Gln Thr Leu Leu Asn Trp
Ala Ser Ala Phe Gly Thr Gln Glu Met Val Glu Phe Leu Cys Glu Arg
                                 25
Gly Ala
<210> 338
<211> 28
<212> PRT
<213> Homo sapiens
<400> 338
Glu Asp Gly Lys Thr Pro Leu Asp Lys Ala Arg Glu Arg Gly His Ser
Glu Val Val Ala Ile Leu Gln Ser Pro Gly Asp Trp
             20
<210> 339
<211> 26
<212> PRT
<213> Homo sapiens
<400> 339
Lys Ala Asp Val Lys Trp His Met Cys Leu Gln Ser Pro Leu Cys Gly
Leu Phe Cys Ser Ile Glu Gly Val Leu Lys
             20
<210> 340
<211> 218
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
```

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 340

Ala Cys Met Asn Pro Ala Met Cys Phe Val Cys Ala Cys Pro His Thr

Gly Ser Thr Pro Glu Lys Ala Ile Leu Gln Gly Arg Leu Ile Ser Leu

Gly Thr Ser Leu Ser Pro Ala Ser Asn Gly Ser Gly Gln Gln Ser Phe

Ser Ile Cys Met Ile Asn Pro Ser Leu Pro Xaa Ser Thr Ser Ser His

His Leu Phe Ser Val Leu Thr Gly Asp Leu Asp Ser Tyr Ser Gln Arg

Lys Leu Lys Pro Thr Ser Arg Lys Ser Phe Leu Leu Pro Lys Thr Gln

Thr Tyr Xaa Val Xaa His Pro Ser Ser Pro Pro Leu Val Leu Val Gln

His Arg Ser Pro Leu Ser Thr Tyr Pro Lys Pro Val Pro Ser Cys Cys 115 120

Ala Leu Asp Leu Ile Ser Val Ile Ala Leu Glu Thr Phe Leu Val Tyr 135

Ile His Leu Phe Pro Ser Ile Asp Leu Ser Tyr Trp Ile Leu Ser Met 150

Leu Gln Pro Leu Leu Leu Ile Lys Gln Gln Ser Thr Lys Thr Leu Ser 170 165

Leu Asn Cys Met Leu Tyr Ser Ser Tyr Tyr Leu Ile Ser Phe Leu Ser 185

Phe Lys Ala Lys Val Leu Arg Arg Gly Gly Asn Ile Leu His His Phe 200

Phe Thr Ser Tyr Ser Phe Phe Asn Thr Tyr 210 215

<210> 341

<211> 28

<212> PRT <213> Homo sapiens

<400> 341

Cys Pro His Thr Gly Ser Thr Pro Glu Lys Ala Ile Leu Gln Gly Arg

Leu Ile Ser Leu Gly Thr Ser Leu Ser Pro Ala Ser 20

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<210> 342
<211> 24
<212> PRT
<213> Homo sapiens
<400> 342
Gln His Arg Ser Pro Leu Ser Thr Tyr Pro Lys Pro Val Pro Ser Cys
Cys Ala Leu Asp Leu Ile Ser Val
            20
<210> 343
<211> 29
<212> PRT
<213> Homo sapiens
<400> 343
Ile Lys Gln Gln Ser Thr Lys Thr Leu Ser Leu Asn Cys Met Leu Tyr
Ser Ser Tyr Tyr Leu Ile Ser Phe Leu Ser Phe Lys Ala
             20
<210> 344
<211> 28
<212> PRT
<213> Homo sapiens
Phe Leu Cys Ala Leu Ser Pro Leu Gly Gln Leu Leu Gln Asp Arg Tyr
Gly Trp Arg Gly Gly Phe Leu Ile Leu Gly Gly Leu
             20
<210> 345
<211> 27
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 345
Leu Leu Asn Cys Cys Val Cys Ala Ala Leu Met Arg Pro Leu Val Val
Thr Ala Gln Pro Gly Xaa Gly Pro Pro Arg Pro
```

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<210> 346
<211> 25
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 346
Ser Arg Arg Leu Xaa Asp Leu Ser Val Phe Arg Asp Arg Gly Phe Val
Leu Tyr Ala Val Ala Ala Ser Val Met
            20
<210> 347
<211> 14
<212> PRT
<213> Homo sapiens
<400> 347
Gln Ala Gln Ser Asp Cys Ser Cys Ser Thr Val Ser Pro Gly
<210> 348
<211> 24
<212> PRT
<213> Homo sapiens
<400> 348
Val Leu Ala Gly Ile Val Met Gly Asp Leu Val Leu Thr Val Leu Ile
                                     10
Ala Leu Ala Val Tyr Phe Leu Gly
             20
<210> 349
<211> 37
<212> PRT
<213> Homo sapiens
<400> 349
Val Pro Arg Gly Arg Gly Ala Ala Glu Ala Thr Arg Lys Gln Arg Ile
Thr Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg Ser Asp
 Val Tyr Ser Asp Leu
         35
```

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<210> 350
<211> 22
<212> PRT
<213> Homo sapiens
<400> 350
Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg Ser Asp Val
                                    10
Tyr Ser Asp Leu Asn Thr
            20
<210> 351
<211> 58
<212> PRT
<213> Homo sapiens
<400> 351
Leu Val Cys Tyr Cys Ser Thr Lys Lys Glu Lys Lys Leu His Glu Ile
Ala Ile Gln Gln Gly Gln Asn Trp Arg Trp Leu Leu Phe Tyr Lys Glu
Ile Ser Val Pro Gly Phe Gln Ser Val Trp Cys Ser Tyr Lys Cys Leu
Cys Val Val Trp Lys Ala Gly Glu Gly Gly
                          55
<210> 352
<211> 36
<212> PRT
<213> Homo sapiens
<400> 352
Arg Arg Ser Cys Ser Gly Pro Pro Leu Val Asn Thr Ala Gly Lys Ile
Leu Ser Ser Ser Pro Ala Lys Leu Ala Cys Lys Arg Thr Asp Phe His
                                  25
Ile Pro Ser Ile
         35
<210> 353
<211> 37
 <212> PRT
 <213> Homo sapiens
<400> 353
 Arg Ala Ser Ile Leu Gly Ile Asp Asn Glu Arg Gly Cys His Phe Arg
                                     10
```

```
156
His Phe Asn Pro Leu Lys Glu Tyr Lys Arg Lys Lys Glu Asn Lys
Ser Phe Arq Ile Val
        35
<210> 354
<211> 77
<212> PRT
<213> Homo sapiens
<400> 354
Ser Lys Asn Lys Thr Arg Gly Gly Asp Trp Cys Val Thr Val Leu Arg
Lys Arg Arg Lys Ser Phe Met Lys Ser Pro Phe Ser Lys Asp Arg Thr
Gly Asp Gly Phe Ser Phe Thr Lys Lys Ser Leu Ser Gln Ala Phe Ser
Leu Phe Gly Val His Thr Ser Val Cys Val Leu Cys Gly Arg Arg Gly
Lys Ala Gly Glu Gly Gly Pro Val Gln Gly Pro Leu Trp
                     70
<210> 355
<211> 55
<212> PRT
<213> Homo sapiens
<400> 355
Met Lys Ser Pro Phe Ser Lys Asp Arg Thr Gly Asp Gly Phe Ser Phe
Thr Lys Lys Ser Leu Ser Gln Ala Phe Ser Leu Phe Gly Val His Thr
                                 25
Ser Val Cys Val Leu Cys Gly Arg Arg Gly Lys Ala Gly Glu Gly Gly
Pro Val Gln Gly Pro Leu Trp
     50
<210> 356
<211> 154
<212> PRT
<213> Homo sapiens
<400> 356
Met Gly Lys Arg Ala His Glu Val Arg Arg Pro Pro His Ser Arg Pro
```

Leu His Gly Thr Pro Ala Gly Trp Val Leu Asp Pro Ser Gly Tyr Lys

3.0 20 25 Asp Val Thr Gln Asp Ala Glu Val Met Glu Val Leu Gln Asn Leu Tyr Arg Thr Lys Ser Phe Leu Phe Val Gly Cys Gly Glu Thr Leu Arg Asp Gln Ile Phe Gln Ala Leu Phe Leu Tyr Ser Val Pro Asn Lys Val Asp Leu Glu His Tyr Met Leu Val Leu Lys Glu Asn Glu Asp His Phe Phe Lys His Gln Ala Asp Met Leu Leu His Gly Ile Lys Val Val Ser Tyr Gly Asp Cys Phe Asp His Phe Pro Gly Tyr Val Gln Asp Leu Ala Thr Gln Ile Cys Lys Gln Gln Ser Pro Gly His Leu Tyr Ser Asn Ser Trp 135 Ser Ala Thr Pro Asp Gly Arg Gly Gly Pro 150 145 <210> 357 <211> 26 <212> PRT <213> Homo sapiens <400> 357 Val Leu Asp Pro Ser Gly Tyr Lys Asp Val Thr Gln Asp Ala Glu Val Met Glu Val Leu Gln Asn Leu Tyr Arg Thr 20 <210> 358 <211> 26 <212> PRT <213> Homo sapiens <400> 358 Tyr Ser Val Pro Asn Lys Val Asp Leu Glu His Tyr Met Leu Val Leu Lys Glu Asn Glu Asp His Phe Phe Lys His 20

<210> 359

TOOY XEVE , TO LOOK

<211> 25

<212> PRT

<213> Homo sapiens

```
<400> 359
Asp Leu Ala Thr Gln Ile Cys Lys Gln Gln Ser Pro Gly His Leu Tyr
1 5 10 15
```

Ser Asn Ser Trp Ser Ala Thr Pro Asp 20 25

<210> 360

<211> 121

<212> PRT <213> Homo sapiens

(213) HOMO SAPICHE

Thr Glu Ser Lys Leu Tyr Pro Thr Gly Thr Val Leu Thr Thr Phe Gln 20 25 30

Asp Met Cys Lys Thr Leu Pro Leu Arg Ser Ala Asn Ser Lys Ala Gln $35 \hspace{1cm} 40 \hspace{1cm} 45$

Asp Ile Cys Thr Arg Ile His Gly Val Pro Leu Leu Met Gly Glu Glu 50 $$ 55 $$ 60

Ala His Asp Ser Asp Ser His Ala Ser Asp Arg Gly His His Thr Met $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$

Leu Pro Leu Pro Ala Gly Ser Phe Ser Glu Ser Ser His Gln Ala Trp \$85\$ 90 95

Glu Val Glu Met Leu Ile Ala Trp Thr Ala Pro His Tyr Trp Val Met 100 105 110

His Ala Arg Thr Val Gln Arg Gly Ser

<210> 361

<211> 27

<212> PRT

<213> Homo sapiens

 $<\!400>361$ Thr Glu Ser Lys Leu Tyr Pro Thr Gly Thr Val Leu Thr Thr Phe Gln 1 5 10 15

Asp Met Cys Lys Thr Leu Pro Leu Arg Ser Ala 20 25

<210> 362

<211> 27

<212> PRT

<213> Homo sapiens

<400> 362

```
Leu Met Gly Glu Glu Ala His Asp Ser Asp Ser His Ala Ser Asp Arg
                                    10
Gly His His Thr Met Leu Pro Leu Pro Ala Gly
<210> 363
<211> 23
<212> PRT
<213> Homo sapiens
<400> 363
Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Gly Cys Thr Arg Leu
Leu Arg Gly Ser Ser Lys Ile
            20
<210> 364
<211> 62
<212> PRT
<213> Homo sapiens
<400> 364
Met Ser Thr Gly Asp Gly Arg Asp Ala Glu Lys Gly Trp Pro Val Ser
Glu Glu Glu Asn Gln Arg Ser Val Tyr Pro Gly Tyr Pro Glu Cys Asp
Glu Arg Gln Ala Val Pro Gln His Cys Ala Ile Ala Ser Pro Ser Ser
Leu Gln Ser His His Pro Ala Ser Ala Cys Val Pro Arg Arg
     50
<210> 365
<211> 38
<212> PRT
<213> Homo sapiens
<400> 365
Gln Gln Met Thr Leu Gly Thr Lys Ile Lys Trp Gly Gln Leu Gln Arg
Gly Gln Glu Ile Pro Thr Gly Asp Phe Thr Val Arg Asn Phe Met Arg
 Phe Ser Ile Ile Tyr Cys
         35
```

<210> 366 <211> 31

```
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<222> (11) <223> Xaa equals any of the naturally occurring L-amino acids

His Gly Gln Val Ala Cys Ser Ala Val Arg Met Tyr Asn Asn Arg 20 25 30

<210> 367 <211> 103 <212> PRT <213> Homo sapiens

<400> 367
bys Cys Ile Tyr Pro Lys Pro Ala Arg Thr His His Cys Ser Ile Cys
10 15

Asn Arg Cys Val Leu Lys Met Asp His His Cys Pro Trp Leu Asn Asn 20 25 30

Cys Val Gly His Tyr Asn His Arg Tyr Phe Phe Ser Phe Cys Phe Phe $_{35}$ 40 45

Met Thr Leu Gly Cys Val Tyr Cys Ser Tyr Gly Ser Trp Asp Leu Phe 50 60

Arg Glu Ala Tyr Ala Ala Ile Glu Lys Met Lys Gln Leu Asp Lys Asn $65 \hspace{1.5cm} 70 \hspace{1.5cm} 75 \hspace{1.5cm} 80$

Lys Leu Gln Ala Val Ala Asn Gln Thr Tyr His Gln Thr Pro Pro Pro 85 90 95

Thr Phe Ser Phe Arg Glu Arg

<210> 368 <211> 38 <212> PRT <213> Homo sapiens

<400> 368
Ala Arg Gly His Trp Asn Leu Ile Leu Ile Val Phe His Tyr Tyr Gln
10
15

Ala Ile Thr Thr Pro Pro Gly Tyr Pro Pro Gln Gly Arg Asn Asp Ile

Ala Thr Val Ser Ile Cys 35

```
<210> 369
<211> 33
<212> PRT
<213> Homo sapiens
<400> 369
Trp Gln Cys Glu Leu Asp Cys Val Ser His Asp Ser Ser Thr His Ser
Ala Pro Tyr Val Ile Ser Arg Ala Ser Lys Gly Ser Phe Ser Gln Asn
                                 25
Pro
<210> 370
<211> 83
<212> PRT
<213> Homo sapiens
<400> 370
Ser Lys Arg Ala Ser Gly Pro Ala Leu Gly Tyr His Ala Gly Gln Phe
Lys Asp Gln Pro Phe Tyr His Cys Arg Arg Lys Thr Gln Cys Gly Glu
Ile Leu Gly Leu Thr Ser Leu Tyr Ser Gly Lys Gln Lys Phe Gln Pro
Gln Thr Arg Gly Gln Ala Ala Ser Tyr Leu Pro Cys Pro Val Leu Thr
Arg Thr Ser Ser Arg Ile Gln His Trp Ser Trp Pro Pro Pro Leu Leu
Leu Ala Val
<210> 371
<211> 31
<212> PRT
<213> Homo sapiens
<400> 371
Glu Ser Leu Gln Leu Arg Leu Leu Gly Gln Leu Glu Gly Ile Pro Gly
```

Cys Gly Tyr Arg Lys Ala Leu Ala Tyr Ser Gly Ala Leu Thr Phe

<210> 372 <211> 66

```
<212> PRT
<213> Homo sapiens
<400> 372
Ser Leu Ala Pro Trp Glu Trp Asn Glu Leu Gly Ala Pro Ser Leu Gly
Asp Cys Ser Leu Ser Leu Cys Asp Gly Ser Val Ser Trp Thr Val Ser
                                 25
Ala Thr Thr Arg Ala Leu Ile Leu Leu Pro Met Leu Phe Gln Gly Pro
Pro Arg Ala Ala Phe Leu Arg Ile Leu Asp Gln Lys Glu Pro Val Gly
Leu Pro
65
<210> 373
<211> 9
<212> PRT
<213> Homo sapiens
<400> 373
Leu Lys Cys Thr Ile Tyr Gly Gly Ala
                 5
<210> 374
<211> 20
<212> PRT
<213> Homo sapiens
<400> 374
Ala Ser Ile Asp Thr Trp Pro Gly Arg Arg Ser Gly Gly Met Ile Val
                                     10
Ile Thr Ser Ile
<210> 375
<211> 41
<212> PRT
<213> Homo sapiens
<400> 375
Gly Ser Pro Gln Ala Glu Thr Arg Trp Ser Asp Pro Ile Ala Leu His
Gln Gly Lys Ser Pro Ala Ser Ile Asp Thr Trp Pro Gly Arg Arg Ser
             2.0
Gly Gly Met Ile Val Ile Thr Ser Ile
         35
```

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<210> 376
<211> 17
<212> PRT
<213> Homo sapiens
<400> 376
Gly Ser Lys Gly Gln Glu Arg Lys Trp Arg Val Arg Met Gly Tyr Leu
                                    10
Asn
<210> 377
<211> 55
<212> PRT
<213> Homo sapiens
<400> 377
Gln Arg Tyr Arg Leu Leu Pro Leu Phe Cys Tyr Val Cys Ser Arg Lys
Ile Lys Leu Asn Glu Asn Leu Phe Val Phe Ser Ala Tyr Ser Leu Ala
                                 25
             20
Thr Leu Pro His Thr Tyr Leu Phe Ser Ile Val Glu Cys Ser Ser Phe
                             40
Cys Leu Ser Gly Thr Arg Asn
     50
<210> 378
<211> 27
<212> PRT
<213> Homo sapiens
<400> 378
Phe Ser Ala Tyr Ser Leu Ala Thr Leu Pro His Thr Tyr Leu Phe Ser
Ile Val Glu Cys Ser Ser Phe Cys Leu Ser Gly
<210> 379
 <211> 123
 <212> PRT
 <213> Homo sapiens
<400> 379
 Met Thr Leu Asp Glu Trp Lys Asn Leu Gln Glu Gln Thr Arg Pro Lys
 Pro Glu Phe Asn Ile Arg Lys Pro Glu Ser Thr Val Pro Ser Lys Ala
```

25

20

Val Val Ile Arg Glu Ser Lys Tyr Arg Asp Asp Met Val Lys Asp Asp 35 40 45

Tyr Glu Asp Asp Ser His Val Phe Arg Lys Pro Ala Asn Asp Ile Thr

Ser Gln Leu Glu Ile Asn Phe Gly Asn Leu Pro Arg Pro Gly Arg Gly 65 70 75 80

Ala Arg Gly Gly Thr Arg Gly Gly Arg Gly Arg Ile Arg Arg Ala Glu 85 90 95

Asn Tyr Gly Pro Arg Ala Glu Val Val Met Gln Asp Val Ala Pro Asn $100 \hspace{1cm} 105 \hspace{1cm} 110 \hspace{1cm}$

Pro Asp Asp Pro Glu Asp Phe Pro Ala Leu Ser 115 120

<210> 380

<211> 100

<212> PRT

<213> Homo sapiens

<400> 380

Cys Lys Met Leu Pro Pro Thr Gln Met Thr Arg Lys Ile Ser Leu Arg

Cys Leu Glu Arg Ala Leu Phe Pro Ser Thr Ala Glu Leu His Cys Thr 20 25 30

Pro Val Gly Arg Leu Phe Gln Leu Gly Gln Gly Ser Gln Thr Leu Arg 35 4045

Thr Ile Asp Val Ala Phe Pro Val Ser Cys Lys Phe Val Ala Leu Phe 50 55 60

Trp Ala Glu Leu Leu Glu Gly Leu Leu Gln Arg Leu Glu Ser Arg Pro $_{65}$ $_{70}$ $_{70}$ $_{75}$

Phe Pro Lys Lys Met Lys Asn Gly Asp Cys Val Phe Ile Glu Gly Ile 85 95

Ser Asn Glu Glu 100

<210> 381

<211> 41 <212> PRT

<213> Homo sapiens

<400> 381

Pro Pro Ser Ser Trp Ala Trp Ser Gln Arg Arg His Pro Gly Arg Pro
1 5 10 15

Gly Lys Asp Gln Glu Gly Arg Glu Leu Trp Thr Gln Ser Arg Ser Gly $20 \ \ 25 \ \ 30$

```
Asp Ala Arg Cys Cys Pro Gln Pro Arg
<210> 382
<211> 22
<212> PRT
<213> Homo sapiens
<400> 382
Cys Leu Lys Cys Val Tyr Arg Asp Ser Ile Asp Ser Ser Ala Glu Ala
                                    10
Trp Arg Glu Arg Arg Leu
             20
<210> 383
<211> 24
<212> PRT
<213> Homo sapiens
<400> 383
Ala Arg Ala Gly Gln Met Gln Asn Leu Glu Ser Ala Arg Ala Gly Arg
                                    10
Ser Val Ser Thr Gln Thr Gly Ser
             20
<210> 384
<211> 10
<212> PRT
<213> Homo sapiens
<400> 384
Thr Val Trp Gly Ile Leu Pro Arg Lys Arg
<210> 385
 <211> 34
 <212> PRT
 <213> Homo sapiens
 <400> 385
His Glu Ala Ala Gln Gly Ala Val Cys Arg Gly Gln Gly Ala Pro Ala
Thr Asn Pro Gln Ala Pro Val Ala Ala Ala Ala Arg Val Ala Arg Arg
              20
 Val Asn
```

```
<210> 386
```

<211> 255

<212> PRT <213> Homo sapiens

<400> 386

Lys Ile Pro Ser Ala Asn Arg Arg Ala Thr Arg Cys Leu Gly Cys Asp

His Gln Asn Phe Val Lys Val Arg Asn Lys His Lys Gly Lys Pro Thr

Phe Met Glu Glu Val Leu Glu His Leu Pro Gly Lys Thr Gln Asp Glu

Val Gln Gln His Glu Lys Trp Tyr Gln Lys Phe Leu Ala Leu Glu Glu

Arg Lys Lys Glu Ser Ile Gln Ile Trp Lys Thr Lys Lys Gln Gln Lys

Arg Glu Glu Ile Phe Lys Leu Lys Glu Lys Ala Asp Asn Thr Pro Val

Leu Phe His Asn Lys Gln Glu Asp Asn Gln Lys Gln Lys Glu Glu Gln

Arg Lys Lys Gln Lys Leu Ala Val Glu Ala Trp Lys Lys Gln Lys Ser 120

Ile Glu Met Ser Met Lys Cys Ala Ser Gln Leu Lys Lys Lys Lys

Lys Lys Lys Lys Asn Gln Lys Glu Arg Gln Arg Gln Phe Lys Leu Lys 155

Leu Leu Glu Ser Tyr Thr Gln Gln Lys Lys Glu Gln Glu Glu Phe

Leu Arg Leu Glu Lys Glu Ile Arg Glu Lys Ala Glu Lys Ala Glu Lys 185

Arg Lys Asn Ala Ala Asp Glu Ile Ser Arg Phe Gln Glu Arg Asp Leu

His Lys Leu Glu Leu Lys Ile Leu Asp Arg Gln Ala Lys Glu Asp Glu 215

Lys Ser Gln Lys Gln Arg Arg Leu Ala Lys Leu Lys Glu Lys Val Glu 225

Asn Asn Val Ser Arg Asp Pro Ser Arg Leu Tyr Lys Pro Thr Lys 245

<210> 387

<211> 24

<212> PRT

<213> Homo sapiens

```
<400> 387
Val Lys Val Arg Asn Lys His Lys Gly Lys Pro Thr Phe Met Glu Glu
                                     1.0
Val Leu Glu His Leu Pro Gly Lys
             20
<210> 388
<211> 23
<212> PRT
<213> Homo sapiens
<400> 388
Gln His Glu Lys Trp Tyr Gln Lys Phe Leu Ala Leu Glu Glu Arg Lys
Lys Glu Ser Ile Gln Ile Trp
             20
<210> 389
<211> 31
<212> PRT
<213> Homo sapiens
<400> 389
Phe Lys Leu Lys Glu Lys Ala Asp Asn Thr Pro Val Leu Phe His Asn
Lys Gln Glu Asp Asn Gln Lys Gln Lys Glu Glu Gln Arg Lys Lys
<210> 390
<211> 36
<212> PRT
<213> Homo sapiens
<400> 390
 Phe Leu Arg Leu Glu Lys Glu Ile Arg Glu Lys Ala Glu Lys Ala Glu
                                     10
Lys Arg Lys Asn Ala Ala Asp Glu Ile Ser Arg Phe Gln Glu Arg Asp
             2.0
                                  25
 Leu His Lys Leu
         35
 <210> 391
 <211> 24
 <212> PRT
 <213> Homo sapiens
<400> 391
```

```
168
Lys Gln Arg Arg Leu Ala Lys Leu Lys Glu Lys Val Glu Asn Asn Val
Ser Arg Asp Pro Ser Arg Leu Tyr
<210> 392
<211> 44
<212> PRT
<213> Homo sapiens
<400> 392
Leu Pro Pro Cys Leu Ala Gln Ile Phe Pro Phe Phe Ser Ser Gly Thr
Asn Leu Thr Phe Cys Phe Phe Val Phe Val Phe Val Phe Val Phe Ala
Glu Leu Asp Tyr Arg Asn Ser Tyr Glu Ile Glu Tyr
<210> 393
<211> 56
<212> PRT
<213> Homo sapiens
<400> 393
His Val Leu Trp Ser Leu Leu Ser Ala Cys Trp Thr Gln Phe Leu Val
Tyr Phe Cys Cys Leu Met Ile Leu Gln Arg Thr Phe Pro Pro Arg Ala
                                  25
Leu Arg Thr Ser Pro Trp Leu Ser Asn Pro Met Gly Val Lys Gly Lys
                              40
 Lys Lys Lys Gly Thr Phe Met Glu
     50
<210> 394
 <211> 30
 <212> PRT
 <213> Homo sapiens
 <400> 394
 Phe Leu Val Tyr Phe Cys Cys Leu Met Ile Leu Gln Arg Thr Phe Pro
 Pro Arg Ala Leu Arg Thr Ser Pro Trp Leu Ser Asn Pro Met
```

<210> 395 <211> 18

```
<212> PRT
<213> Homo sapiens
<400> 395
Ile Arg His Glu Arg Leu Trp Ala Glu Leu Ala Leu Leu Thr Gly Arg
Asn Glu
<210> 396
<211> 37
<212> PRT
<213> Homo sapiens
<400> 396
Leu Ile Ser Ser Val Asn Lys Thr Lys Gln Lys Arg Ser Asp Ala Thr
Leu Ser His Lys His Asp Arg Leu Leu Asn His Phe Val Phe Phe Gly
Asn Ser Tyr Asn Tyr
         35
<210> 397
<211> 127
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 397
Ser Ser Lys Phe Pro Ser Asp Met Leu Leu Arg Ile Gln Gln Ile Ile
Tyr Cys His Lys Leu Thr Ile Ile Leu Thr Lys Trp Arg Asn Thr Ala
Arg His Lys Ser Lys Lys Glu Asp Glu Leu Ile Leu Lys His Glu
Leu Gln Leu Lys Lys Trp Lys Asn Arg Leu Ile Leu Lys Arg Ala Ala
Ala Glu Glu Ser Asn Phe Pro Glu Arg Ser Ser Ser Glu Val Phe Leu
 Val Asp Glu Thr Leu Lys Cys Asp Ile Ser Leu Leu Pro Glu Xaa Ala
 Ile Leu Gln Val Cys Met Asn Ser Val Tyr Ile Ile Tyr Tyr Asn Leu
                                 105
```

Pro Ser Val Val Val His Ala Cys Asn Pro Ser Cys Leu Gly Gly 115 120 125

<400> 399

lle Arg Pro Asn Lys Asn Asp Gln Met Arg His Cys Leu Ile Asn Met 1 5 10 15

Ile Asp Tyr

<210> 400 <211> 37 <212> PRT <213> Homo sapiens

Asn Leu Val Asn Phe Leu Gln Ile Cys Tyr Cys Gly Tyr Asn Arg Ser 20 25 30

Ser Ile Val Thr Ser

<210> 401 <211> 31 <212> PRT <213> Homo sapiens

 $<\!400>401$ Ile Ser Phe Arg Tyr Ala Ile Ala Asp Thr Thr Asp His Leu Leu Ser 1 5 10 15

Gln Ala Asn His Tyr Pro Asn Lys Met Ala Glu Tyr Ser Lys Thr $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

```
171
<210> 402
<211> 53
<212> PRT
<213> Homo sapiens
<400> 402
Thr Leu Val Ala Gly Ser Pro Cys Ser Leu Ser Arg Trp Ile Met Ala
Gly Phe Cys His Gly Glu Leu Val Gln Ser Asp Met Glu Ser Gln Glu
Trp Glu Arg Gly Gln Val Val Leu Ser His Thr Ser Leu Pro Trp Cys
Tyr Val Ser Pro Arg
    50
<210> 403
<211> 39
<212> PRT
<213> Homo sapiens
<400> 403
Met Ala Gly Phe Cys His Gly Glu Leu Val Gln Ser Asp Met Glu Ser
Gln Glu Trp Glu Arg Gly Gln Val Val Leu Ser His Thr Ser Leu Pro
                                 25
Trp Cys Tyr Val Ser Pro Arg
```

<210> 404 <211> 94 <212> PRT <213> Homo sapiens

 $<\!400>404$ Met Ala Val Trp Ile Ser Gly Ser Tyr Ser Ser Phe Cys Ser Arg Ser 1 1 5 10

Asn Trp Asp Val Phe Ser Pro Asn Ile Val Leu Ala Ser Leu Pro Phe $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Ser Phe Arg Ser Val Ser Lys Ala Ala Lys Pro Trp Trp Leu Ala Leu 35 40 45

Pro Ala Leu Phe Pro Asp Gly Leu Trp Leu Asp Ser Ala Met Gly Ser 50 60

Leu Tyr Ser Gln Thr Trp Lys Ala Arg Asn Gly Lys Glu Val Arg Trp $_{65}$ $_{70}$ $_{70}$ $_{75}$

Phe Ser Pro Thr Pro His Cys Leu Gly Ala Met Ser His Leu

```
<210> 405
<211> 19
<212> PRT
<213> Homo sapiens
<400> 405
Gly Trp Leu Tyr Gly Ser Val Gly Leu Ile Pro His Ser Ala Ala Glu
Ala Thr Gly
<210> 406
<211> 14
<212> PRT
<213> Homo sapiens
<400> 406
Val Cys Ile Pro Gly Ala Ala Gly Leu Ser Val Leu Leu Gly
<210> 407
<211> 23
<212> PRT
<213> Homo sapiens
<400> 407
Ile Ala Trp Ser Gly Asn Ile Pro Ser Leu Leu Cys Leu Phe Glu His
Asp Met Ser Phe Gln Asp Glu
             20
<210> 408
<211> 90
<212> PRT
<213> Homo sapiens
<400> 408
Ile Arg His Glu Gly Gln Ser Ser Arg Gly Ser Ser His Cys Asp
Ser Pro Ser Pro Gln Glu Asp Gly Gln Ile Met Phe Asp Val Glu Met
His Thr Ser Arg Asp His Ser Ser Gln Ser Glu Glu Glu Val Val Glu
Gly Glu Lys Glu Val Glu Ala Leu Lys Lys Ser Ala Asp Trp Val Ser
Asp Trp Ser Ser Arg Pro Glu Asn Ile Pro Pro Lys Glu Phe His Phe
 65
                     7.0
```

Arg His Pro Lys Arg Ser Val Ser Leu Ser 85

<210> 409

<211> 40

<212> PRT

<213> Homo sapiens

<400> 409

Gly Ile Leu Leu Thr Leu Tyr Pro Phe Trp Pro Glu Asp Ile Leu Glu 10

Phe Pro Asn Arg Val Tyr Cys Cys Leu Glu Ile Cys Lys Gly Phe Phe

Ser Ala Asn Ala Thr Ser Arg Leu 35

<210> 410

<211> 47

<212> PRT

<213> Homo sapiens

<400> 410

Glu Phe Gly Thr Arg Asp Arg Val Val Pro Glu Ala Val Leu Thr Val 10

Thr Ala Leu Arg His Lys Lys Met Gly Arg Ser Cys Leu Met Trp Lys

Cys Thr Pro Ala Gly Thr Ile Ala Leu Ser Gln Lys Lys Leu 40

<210> 411

<211> 52

<212> PRT

<213> Homo sapiens

<400> 411

Ala His Pro Leu Pro Ala Pro Thr Glu Gly Lys Glu Lys Pro Leu Glu

Met Arg Val Thr Cys Glu Val Val Tyr Cys His Ser Ser Leu Phe Glu 20

Leu Glu Thr Ile Val Ser Met Thr Gln Pro Thr Thr Leu Phe Leu His 40

Ile Gln Phe Gln 50

```
<211> 68
<212> PRT
```

<213> Homo sapiens

<400> 412

Gly Tyr Phe Leu Arg Arg Ile Ser Glu Gly Val His Ser Ile Ser Leu $20 \hspace{1cm} 25 \hspace{1cm} 30$

Pro Phe Ser Cys Phe Gly Phe Gly Ala Arg His Leu Tyr Trp Lys Ala 35 \$40\$

Trp Lys Cys Val

<210> 413

<211> 64 <212> PRT

<213> Homo sapiens

<400> 413

Gln Ser Leu Leu Phe Arg Asn Leu Gln Gly Leu Leu Phe Arg Lys 1 $$ 5 $$ 10 $$ 15

Cys His Gln Gln Ile Ile Ile Leu Ser Ala Met Leu Leu Ser Leu Ile 20 25 30

Ser Ala Thr Arg Leu Asp Leu Tyr His Ser Trp Tyr Lys Phe Tyr Ser 35 40 45

Cys Asn Ile Thr Thr Ile Ser Leu Leu Lys Arg Asp Gln Val Ser Lys 50 60

<210> 414

<211> 24

<212> PRT

<213> Homo sapiens

<400> 414

Val Thr Ala Tyr Gln Asn Gln Gln Ile Thr Arg Leu Lys Ile Asp Arg 1 5 10 15

Asn Pro Phe Ala Lys Gly Phe Arg

<210> 415

<211> 16

```
<212> PRT
<213> Homo sapiens
<400> 415
Gly Thr Ala Thr Val Thr Ala Tyr Gln Asn Gln Gln Ile Thr Arg Leu
<210> 416
<211> 24
<212> PRT
<213> Homo sapiens
<400> 416
Lys Ile Asp Arg Asn Pro Phe Ala Lys Gly Phe Arg Asp Ser Gly Arg
         5
Asn Arg Met Gly Leu Glu Ala Leu
            20
<210> 417
<211> 21
<212> PRT
<213> Homo sapiens
<400> 417
Ser Thr Leu Leu Gln Val Leu Gly Met Ala Phe Leu Pro Leu Thr Leu
                                    10
Thr Phe Cys Leu Ala
             20
<210> 418
<211> 30
<212> PRT
<213> Homo sapiens
<400> 418
Val Glu Ser Tyr Ala Phe Trp Arg Pro Ser Leu Arg Thr Leu Thr Phe
 Glu Asp Ile Pro Gly Ile Pro Lys Gln Gly Asn Ala Ser Ser
              20
<210> 419
<211> 65
 <212> PRT
 <213> Homo sapiens
 <220>
<221> SITE
```

```
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 419
His Gly Asp Trp Ile Tyr Val His Ile Val Glu Gln Leu Asn Gln Ala
Asn Asn Lys Ser Val Thr Ser His Thr Tyr Phe Val Val Lys Thr Cys
Lys Ile His Ser Leu Ser Asn Phe Gln Ala Ser Asn Thr Leu Leu Xaa
Thr Val Val Thr Met Leu Tyr Asn Arg Ser Leu Glu Leu Ile Leu Pro
Val
65
<210> 420
<211> 68
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 420
Thr Tyr Ser Ser Cys Leu Thr Lys Ile Leu Tyr Ser Leu Ile Asn Ile
                                      10
Tyr Pro Ile Pro His Cys Ser Pro Ala Xaa Ile Thr Thr Ile Leu Leu
                                  25
Ser Ala Ser Met Asn Leu Thr Phe Phe Phe Phe Arg Phe His Ile Cys
                              40
Glu Ile Ala Gln Tyr Leu Ser Phe Cys Ala Trp Leu Ile Ser Leu Asn
 Ile Lys Ser Leu
 65
 <210> 421
 <211> 33
 <212> PRT
 <213> Homo sapiens
 <400> 421
 Met Asn Leu Thr Phe Phe Phe Phe Arg Phe His Ile Cys Glu Ile Ala
  1
 Gln Tyr Leu Ser Phe Cys Ala Trp Leu Ile Ser Leu Asn Ile Lys Ser
              20
                                  25
```

Arg Gln

<210> 422 <211> 82 <212> PRT <213> Homo sapiens <400> 422 Arg Ser Lys Arg Gln Ser Gln Gly Ser Arg Cys Ser Val Pro Leu Leu Ala Gln Gln Ser Arg Ser Pro Pro Val Pro Leu Gln Ala Gln Pro Ala Trp Leu Leu Gly Ser Glu Thr Ile Ala Trp Ser Gly Gly Ser Gly Trp Glu Gly Pro Arg Asp Pro Gly Thr Ser Thr Ala Ala Gly Asn Ser Gly Pro Gly Ile Gly Met Gly His Arg Thr Pro Pro Pro Ser His Thr 65 Gly Arg <210> 423 <211> 30 <212> PRT <213> Homo sapiens <400> 423 Arg Trp Asp Pro Ala Trp Gly Leu Asp Ile Pro Glu Ser Ser Cys Pro Val Thr Met Gly Glu Leu Arg Ser Gly Asp Gly Ile Val Leu 25 20 <210> 424 <211> 50 <212> PRT <213> Homo sapiens <400> 424 Gly Ala Leu Leu Trp Asp Asn Ser Met Ile Ser Ala Pro Arg Gly Ser His Arg Glu Ala Gly Ala Leu Phe Pro Ser Trp Leu Ser Asn Pro Ala 25

Val Leu Pro Ser Arg Ser Arg Pro Ser Gln Pro Gly Cys Leu Asp Pro

<210> 425 <211> 49 <212> PRT <213> Homo sapiens <400> 425 Asn Ser Ala Arg Glu Pro Arg Arg Trp Ile Arg Pro Thr Arg Gly Ser Gly Glu Thr Thr Ala Pro Cys Cys Phe Glu Pro Leu Asn Gly Gly Thr Leu Val His Ala Ala Ala Met Ala Arg Ala Ser Glu Ala Ala Gly Thr Gly <210> 426 <211> 11 <212> PRT <213> Homo sapiens <400> 426 Met Ala Arg Ala Ser Glu Ala Ala Gly Thr Gly 5 <210> 427 <211> 84 <212> PRT <213> Homo sapiens <400> 427 Cys Phe Thr Thr Ala Phe Gln Lys Ala Leu Arg Asp Pro Arg Pro Thr Leu Pro Asp Thr His Gly Ser Leu Arg Asn Ala Pro Leu Lys Ser Leu Thr Leu Pro Ala Ala Phe Val Val Ser Phe Phe Leu Ser Leu Leu

Gln Asp Gly Ile Lys Glu Arg Ser Gln Thr Gln Asn Ala Thr Phe Phe
50

Phe His Asp Arg Ser Asp Ile Glu Gly Leu Ser Glu Glu Pro Cys Ser
65

70

80

Gly Thr Thr Pro

```
179
<210> 428
<211> 95
<212> PRT
<213> Homo sapiens
<400> 428
Leu Ala Leu Gln Glu Ala Val Thr Gly Lys Gln Val Leu Cys Ser Pro
Pro Gly Ser Ala Ile Pro Gln Ser Ser Arg Pro Ala Pro Gly Pro Ala
                                 25
Ser Leu Ala Ala Trp Ile Arg Asp Asn Ser Leu Val Trp Arg Arg Leu
Arg Val Gly Gly Thr Gln Gly Pro Gly His Gln Tyr Ser Ser Trp Glu
Phe Arg Pro Arg Asp Arg Asp Gly Ala Gln Asp Thr Thr Pro Ile Ser
His Arg Glu Met Lys Val Gly Ser Ser Met Gly Thr Gly His Pro
                 85
                                     90
<210> 429
<211> 47
<212> PRT
<213> Homo sapiens
<400> 429
Met Ala Gly Arg Leu Phe Thr Leu Leu Leu Trp Gln Glu Leu Ala Arg
                                    10
Arg Leu Val Pro Gly Asp Ala Ser Pro Arg Leu Ser Arg Lys Arg Ser
Val Thr Pro Gly Pro Pro Phe Pro Thr Leu Thr Val Pro Ser Glu
<210> 430
<211> 59
<212> PRT
<213> Homo sapiens
Val Trp Leu Leu Ser Ser Ile Leu Leu Arg Val Leu Trp Asn Arg Tyr
```

Thr Leu Gln Glu Leu Ser Phe Trp Leu Pro Trp Phe Ala Ser Arg Ala 20 \$20\$

Thr Ser Leu Val Leu Gln His Gly Asp Asn Tyr Leu Leu Phe Leu Phe 35 40 45

Cys Phe Val Cys Phe Val Leu Ala Met Pro Phe

```
<210> 431
<211> 26
<212> PRT
<213> Homo sapiens
<400> 431
Ile Arg His Glu Val Ser Met Ala Phe Val Phe His Leu Ala Gln Gly
                                     10
Thr Leu Glu Pro Leu Tyr Ile Ala Gly Ala
             20
<210> 432
<211> 40
<212> PRT
<213> Homo sapiens
<400> 432
Asn Ser Ala Arg Gly Glu Tyr Gly Phe Cys Leu Pro Ser Cys Ser Gly
Tyr Phe Gly Thr Ala Ile His Cys Arg Ser Leu Ala Ser Gly Tyr His
Gly Leu Leu Pro Glu Gln Gln Ala
        35
<210> 433
<211> 26
<212> PRT
<213> Homo sapiens
<400> 433
His Glu Leu Thr Val Pro Ser Arg Met Gly Ser Lys Gly Lys Pro Tyr
Pro Cys Gly Phe Tyr Ser Ser Leu Ile Pro
<210> 434
<211> 59
<212> PRT
<213> Homo sapiens
<400> 434
Gly Thr Glu Ser Pro Met Val Met Cys Cys Arg Glu Val Ser Gln Ser
Glu Asn Cys Leu Phe Leu Asp Thr Thr Phe Arg Phe Ile Phe Gly Lys
                                 25
Thr Phe Thr Asn His Asp Tyr Ile Ser Ile His Phe Tyr Phe Leu Lys
         35
                             40
                                                 45
```

101 10 101

```
Ala Phe Leu Phe Ser Phe Phe Tyr Ser Asn Val
<210> 435
<211> 13
<212> PRT
<213> Homo sapiens
<400> 435
Ser Leu Gln Tyr Arg Ile Arg Ile Pro Gly Arg Pro Thr
<210> 436
<211> 22
<212> PRT
<213> Homo sapiens
<400> 436
Asp Leu Val Thr Tyr Thr Ser Ser Leu Gln Tyr Arg Ile Arg Ile Pro
                                     10
Gly Arg Pro Thr Arg Pro
            20
<210> 437
<211> 36
<212> PRT
<213> Homo sapiens
<400> 437
Leu Gly Asn Lys Lys Tyr Ile Asn Ile Arg Cys Leu Glu Met Gln Val
Thr Leu Lys Ile Leu Cys Glu Ile Glu Lys Lys Glu Arg Arg Gly Thr
His Cys Leu Val
         35
<210> 438
<211> 22
<212> PRT
<213> Homo sapiens
<400> 438
Val Lys Thr Ala Glu Cys Tyr Ser Ile Pro Leu Gly Ser Cys Pro Val
Asn Ile Gln Arg Val Arg
             20
```

```
<210> 439
<211> 65
<212> PRT
<213> Homo sapiens
<400> 439
His Lys Cys Phe Gln Cys Phe Ile Leu Ala Asn Gly Phe Leu Lys Val
Ile Lys Pro Phe Gln Arg Asn Trp Ser Asp Lys Thr Phe Phe Leu Val
Cys Leu Asn Lys Ala Ile Ser Glu Ala Leu Leu Ser Lys Met Thr Phe
Leu Ser Phe Phe Lys Thr Asn Leu Leu Leu Glu Thr Phe Cys Thr
Ile
65
<210> 440
<211> 99
<212> PRT
<213> Homo sapiens
<400> 440
Leu Leu Gly Val Leu Lys Pro Leu Tyr Phe Ser Val Glu Pro Val Leu
Gly Glu Arg Ser Val Ala Phe Glu Glu Val Arg Glu Lys Asn His Gly
                                  25
Thr Ser Gly Phe Leu Ser Leu Tyr Ser Leu Ala Ala Ile Val Cys Gly
                              4.0
His Leu Met Phe Phe His Thr Leu Leu Gly Arg Gly Gly Asn Asp His
Pro Gly Gln Ser Pro Leu Pro Gly Met Arg Pro Leu Arg Gly Gly Leu
Ala Gly Gln Ala Pro Ser Gly His Pro Trp Met Gln Pro Leu Asp Thr
Cys Leu Leu
 <210> 441
 <211> 43
 <212> PRT
 <213> Homo sapiens
```

<400> 441
Arg Pro Thr Arg Pro Pro Thr Arg Pro Asp Arg Pro Ser Leu Glu Leu
10
15

```
Ala Pro Gly Leu Cys Ala Asp Phe Leu Gly Ser Ser Asn His Cys Ile
                                 25
Phe Leu Leu Ser Leu Tyr Leu Gly Arg Asp Gln
<210> 442
<211> 49
<212> PRT
<213> Homo sapiens
<400> 442
Glu Lys Arg Ile Met Val Pro Gln Gly Phe Phe Pro Phe Thr Arg Trp
Gln Pro Leu Ser Val Gly Thr Ser Cys Phe Ser Thr Leu Tyr Trp Ala
Val Glu Val Thr Ile Thr Gln Ala Ser Leu Leu Cys Leu Gly Cys Ala
                             40
Leu
<210> 443
<211> 30
<212> PRT
<213> Homo sapiens
<400> 443
Asn Ser Ala Arg Val Thr Gln Lys Gly Glu Ser Val Gly Ser Val Gly
Cys Met Arg Ala Ile Ala Gly Phe Asp Asn Tyr Pro Leu Phe
<210> 444
<211> 33
<212> PRT
<213> Homo sapiens
Gly Thr Ile Gly Ile Phe Trp Pro Leu Pro Val Ala Ile Leu Ser Ser
Gly Asp Tyr Leu Gln Thr Gln Ile His Arg Pro Leu Leu His Arg Gly
```

Thr

```
<211> 20
<212> PRT
<213> Homo sapiens
Leu Pro Leu Pro Leu Ser Ser Leu Leu His Ile Ala Thr Cys Asn Pro
                 5
                                    10
Phe Pro Lys Thr
             20
<210> 446
<211> 46
<212> PRT
<213> Homo sapiens
<400> 446
Ser Tyr Phe Phe Val Tyr Asn Leu Ile Leu Lys Ile Ile Gln Gly Asp
                 5
His Ala Ser Ile Ile Leu Leu Ala Thr Ile Pro Ile Phe Gly Asp Ile
                                 25
Tyr Tyr Val Lys Gly Gln Leu Ala Ser Phe Gly Pro Tyr Leu
        35
                            40
<210> 447
<211> 21
<212> PRT
<213> Homo sapiens
<400> 447
Leu Phe Tyr His Leu Glu Ile Ile Ser Arg His Lys Ser Ile Ala His
                                    10
Cys Ser Ile Glu Ala
            20
<210> 448
<211> 12
<212> PRT
<213> Homo sapiens
<400> 448
Cys Ser Cys His Cys Pro Ser Arg Ala Phe Ser Thr
                5
<210> 449
<211> 29
<212> PRT
<213> Homo sapiens
<400> 449
```

```
Pro His Ala Ile His Ser Gln Lys Pro Ser Ser Ile Phe Leu Ile Thr
                                    10
Asp Val Phe Pro Asp Pro Pro Val Gly Ile Tyr Leu Leu
<210> 450
<211> 15
<212> PRT
<213> Homo sapiens
<400> 450
Thr Arg Pro Thr Met Pro Asn Phe Leu Trp Phe Pro Lys Cys Ala
                                    1.0
<210> 451
<211> 35
<212> PRT
<213> Homo sapiens
<400> 451
Arg Asn Ser Leu His Cys Tyr Asn Glu Gln Pro Pro Asn Ala Ser Gly
Leu Ile Gln Trp Ser Ser Asp Leu Ile Pro Ile Ser Leu Gln Cys Gly
                                 25
            20
Cys Ser Trp
        35
<210> 452
<211> 15
<212> PRT
<213> Homo sapiens
<400> 452
Ile Arg His Glu Glu Lys Gly Gly Lys Ala Gln Arg Trp Ala Glu
<210> 453
<211> 62
<212> PRT
<213> Homo sapiens
<400> 453
Val Asp Pro Arg Val Arg Leu Pro Leu Phe Trp Trp Gln Pro Ser Cys
Ala Val Tyr Leu Phe Pro Arg Val Tyr Asn Asn Met Cys Thr Arg Val
```

Leu Gly Thr Leu Pro His Cys Trp Asp Leu Ala Thr Leu Leu Gln Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Ser Arg Ile Trp Gly Asn Val Ser Glu Ala Pro Gly Met 55

<210> 454

<211> 87

<212> PRT <213> Homo sapiens

<400> 454

Val Pro Tyr His Ile Ala Gly Thr Leu Pro His Cys Cys Ser Leu Pro

Val Gly Tyr Gly Gly Met Ser Val Arg Leu Gln Gly Cys Arg Tyr Val

Gly Asn Val Gly Pro Gln Gly Asn Met Gln Ser Gly Arg Ser Trp Ala

Leu Lys Met Val Leu Ceu Cys Asn Ser Cys Leu Gly Leu Gly Val Gly 50

Ser Val Gly Pro Ser Met Ser Ser Leu Phe Gly Ala Val Leu Ser Glu

Thr Pro Gly Ser Ser Val Tyr

<210> 455

<211> 29

<212> PRT

<213> Homo sapiens

<400> 455

Met Leu Asp Pro Arg Ala Thr Cys Asn Leu Val Gly Val Gly Leu Ser

Lys Trp Cys Cys Cys Val Thr Ala Ala Trp Val Leu Gly 20

<210> 456

<211> 86

<212> PRT <213> Homo sapiens

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 456

Pro Gln Ile Lys Leu Leu Asn Ser Asp Ala Leu Gly Met Arg Thr Thr

Ser Xaa Asp Leu Val Pro Cys Asn Gln Cys Phe Ile Pro Leu Pro Pro

Ser Cys Asn Arg Ile Ala Ser Arg Lys Ala Val Asn Trp Lys Gln Gln

25

Arg Leu Pro Ala Val Arg Gly Leu Leu Asn Asn Ala Pro His Arg Arg 55

Pro Pro Thr Pro Arg Thr Pro Cys Val Phe Pro Ser Glu Gly Pro Lys

Gly Tyr Gly Phe His Val 85

<210> 457

<211> 39 <212> PRT

<213> Homo sapiens

<220> <221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 457

Glu Gln Leu Ala Xaa Ile Ser Cys Arg Val Ile Asn Val Ser Phe Arg 1

Cys Leu His His Val Ile Glu Ser Leu Pro Glu Arg Gln Leu Thr Gly

Ser Ser Arg Gly Ser Gln Pro 35

<210> 458

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 458

Glu Asp Cys Ser Thr Met Pro Pro Ile Ala Ala Pro Pro Pro Leu Ala

Pro Leu Val Phe Ser Pro Leu Arg Gly Pro Arg Val Met Ala Phe Met

Ser Arg Cys Gly Asp Arg Gly Gly Arg Gly Arg Ser Xaa Ala Gly Arg

Gly Trp Pro Trp Ser Glu Ser Gly Val Ile Asn Ala His Pro Lys Lys 55

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Arg Pro Cys Pro Gly Pro Met Leu Ser 65 70
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<210> 459 <211> 48 <212> PRT

<213> Homo sapiens

 $<\!400\!> 459$ Glu Phe Gly Thr Arg Arg Gln Trp Gly Thr Arg Cys Phe Pro Pro Leu 1 5 10 15

Val Gly Arg Lys Gln Ser Ala Leu Arg Arg Arg Glu Gly Lys Ala Arg 20 25 30

Ala Gly Arg Cys Cys Gly Lys Arg Ser Val Lys Ala Gly Phe Asp Ala 35 40 45

<210> 460 <211> 34 <212> PRT

<213> Homo sapiens

<400> 460

Pro Lys Val Leu Ala Val Leu Lys Lys Lys Asn His Val Ala Leu Ser 1 5 10 15

Ile Phe Glu Leu Leu Ser Asn Asp Ile Cys Ser Phe Ile Ser Phe Phe 20 25 30

Met Ser

<210> 461 <211> 28 <212> PRT <213> Homo sapiens

<400> 461 Glu Gly Pro Asp Ile Asn Ser Asn Leu Lys Phe Leu Leu Cys Leu Lys

Lys Lys Ile Met Trp Pro Phe Gln Tyr Leu Asn Cys 20 25

<210> 462 <211> 47 <212> PRT <213> Homo sapiens <400> 462 Leu Leu Ser Leu Ile Leu Leu Arg Ile Trp Tyr Asp Phe Ser Lys Gln 1 5 10 15

Thr Val Phe Trp Phe Phe Leu Asn Val Phe Asn Phe Phe Ser Cys 20 25 30

Asn Asn Asp Gly Ala Cys Ser Tyr Lys Tyr Arg Lys Val Gln Ile $_{35}$ 40 45

<210> 463 <211> 48 <212> PRT <213> Homo sapiens

<400> 463
Arg Lys Leu Phe His Lys Ile Asn Ser Lys Ser Phe His Leu Ser Gly
10
15

Met His Ile Leu Ile Ser Val Trp Ile Val Arg Ser Arg Ile Ile Lys

Val Lys Tyr Glu Leu Leu Cys Phe Phe Asp Val Ile Phe Tyr Val

<210> 464 <211> 41 <212> PRT <213> Homo sapiens

<400> 464
Asn Ser Ala Arg Asp Val Phe Phe Thr Gln Lys Ile Leu Tyr Ser Gln
1 10 15

Thr Cys Ile Phe Phe Pro Cys Leu Val Pro Phe Ser Phe Leu Phe Ser

Phe Phe Phe Leu Ser Phe Val Gly

<210> 465 <211> 56 <212> PRT <213> Homo sapiens

<400> 465
Met Phe Ser Ser Leu Lys Lys Phe Tyr Ile Leu Lys His Val Tyr Ser
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Phe Pro Val Leu Phe His Phe Leu Phe Phe Phe Leu Phe Ser Phe Ser 20 25 30

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Phe Leu Ser Trp Ala Glu Lys Gly Ala Gly Lys Met Lys Leu Ala Thr
                            40
Glu Asn Cys Lys Met Val Lys Ser
<210> 466
<211> 39
<212> PRT
<213> Homo sapiens
<400> 466
Ile Gln Leu Leu Tyr Leu Lys Gly Ala Ala Met Lys Tyr Leu Ser Tyr
Val Ala Arg Leu Leu Phe Leu Lys Ala Leu Asp Leu Phe Ala Pro Lys
                                 25
Met Val Gln Ile Asp Ser Phe
        35
<210> 467
<211> 65
<212> PRT
<213> Homo sapiens
<400> 467
Val Asp Pro Arg Val Arg Arg Phe Trp Glu Asp Pro Glu Tyr Pro Pro
Val Ala Val Met Ser Arg Leu Met Leu Arg Arg Ile Pro Thr Val Met
Ser Asn Thr His Arg Thr Gln Pro Ser Thr Trp Glu Gln Ile Lys Lys
Leu Ser Gln Met Val Gly Glu Asn Leu Arg Lys Ala Gly Gln Pro Val
Thr
 65
<210> 468
<211> 25
<212> PRT
<213> Homo sapiens
<400> 468
Val Arg Arg Phe Trp Glu Asp Pro Glu Tyr Pro Pro Val Ala Val Met
Ser Arg Leu Met Leu Arg Arg Ile Pro
             2.0
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<210> 469
<211> 27
<212> PRT
<213> Homo sapiens
<400> 469
Ser Asn Thr His Arg Thr Gln Pro Ser Thr Trp Glu Gln Ile Lys Lys
Leu Ser Gln Met Val Gly Glu Asn Leu Arg Lys
<210> 470
<211> 116
<212> PRT
<213> Homo sapiens
<400> 470
Ser Ala Cys His Ser His Thr Val Phe Asn Trp Ser Glu Gln Asn Gly
Gln Met Val Gln Met Val Arg Arg Met Ala Arg Val Pro Ile Ile Trp
Asn His Gly Ser Ile Gly Ala Pro Gln Pro Gln Met Ile Trp Pro Ile
Val Gly Ala Lys His Lys Asp Leu Trp Gln Leu Leu Ile Ala Leu Asn
Lys Ile Lys Ile Trp Glu Arg Ile Lys Lys His Leu Glu Gly His Ser
Ala Asn Leu Ser Leu Asp Ile Ala Lys Tyr Ile Tyr Ile Phe Lys Ala
Ser Gln Ala His Leu Thr Leu Met Pro Glu Leu Glu Cys Ser Lys Glu
            100
                                105
Leu Gln Thr Asp
       115
<210> 471
<211> 25
<212> PRT
<213> Homo sapiens
Met Ala Arg Val Pro Ile Ile Trp Asn His Gly Ser Ile Gly Ala Pro
Gln Pro Gln Met Ile Trp Pro Ile Val
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<210> 472
<211> 32
<212> PRT
<213> Homo sapiens
<400> 472
Arg Ile Lys Lys His Leu Glu Gly His Ser Ala Asn Leu Ser Leu Asp
Ile Ala Lys Tyr Ile Tyr Ile Phe Lys Ala Ser Gln Ala His Leu Thr
                                 25
<210> 473
<211> 66
<212> PRT
<213> Homo sapiens
<400> 473
Val Phe Leu Gln Gln Gly Leu Thr Gln Arg Ser Val Ile Leu Ile Gly
His Ile Cys Gln Phe Trp Leu Ala Ile Met Pro Gly Tyr Asn His Phe
Met Thr Gln Leu His Met Leu Ser Gly Leu Asn Ile Tyr His Asn Lys
Ser Ala Pro Ile Ile Glu Ala Tyr His Pro Gln Lys Ser Ile Cys Lys
                          55
Gln Asn
 65
<210> 474
<211> 28
 <212> PRT
 <213> Homo sapiens
 <400> 474
 Ile Gly His Ile Cys Gln Phe Trp Leu Ala Ile Met Pro Gly Tyr Asn
 His Phe Met Thr Gln Leu His Met Leu Ser Gly Leu
              20
                                  25
 <210> 475
 <211> 58
 <212> PRT
 <213> Homo sapiens
```

<400> 475 Ser Ile Pro Gly Thr Pro Asp Leu Asn Ala Arg Thr Gly Val Leu Glu

Gly Ala Ala Asp Arg Leu Ala Ala Ser Asn Pro Leu Lys Trp Ile Lys 25

Thr Leu Arg Ser Ser Val Ile Ser Met Met Ile Val Leu Leu Ile Cys

Val Val Cys Leu Tyr Ile Val Cys Arg Cys

<210> 476

<211> 27 <212> PRT

<213 > Homo sapiens

<400> 476

Val Leu Glu Gly Ala Ala Asp Arg Leu Ala Ala Ser Asn Pro Leu Lys

Trp Ile Lys Thr Leu Arg Ser Ser Val Ile Ser 20

<210> 477

<211> 75

<212> PRT

<213> Homo sapiens

<400> 477

Leu Thr Val Thr Lys Leu Pro Trp Leu Phe Ile Ala Leu Gln Asn Lys

Arg Met Gly Thr Ser Trp Glu Gln Ala Pro Lys Ser Gly His Lys Leu

Ala Pro Lys Leu Val Ile Asn Lys Ile Ser Ala Ala Leu Ser His Ala

Cys Asp Ser Leu Thr Pro Thr Leu Glu Gly Cys Arg Phe Thr Gly Met

Arg Ala Arg Asn Asn Trp Pro Thr Gln Gly Gly

<210> 478

<211> 29

<212> PRT

<213> Homo sapiens

<400> 478

Met Gly Thr Ser Trp Glu Gln Ala Pro Lys Ser Gly His Lys Leu Ala

Pro Lys Leu Val Ile Asn Lys Ile Ser Ala Ala Leu Ser 20

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<210> 479
<211> 52
<212> PRT
<213> Homo sapiens
<400> 479
Ser Thr His Ala Ser Val Gln Lys Lys Asp Leu Thr Lys Phe Ser Ala
His Ser Trp Leu Lys Lys Lys Lys Thr Phe Arg Lys Met Ile Met Glu
Glu Ile Phe Leu Asn Leu Ile Lys Asn Ile Tyr Lys Ser Pro Tyr Ser
Gln Cys Asn Thr
    50
<210> 480
<211> 17
<212> PRT
<213> Homo sapiens
<400> 480
Val Arg Ser Glu Lys Gly Phe Asp Lys Ile Gln Cys Pro Phe Met Val
 1
                                     10
Lys
<210> 481
<211> 46
<212> PRT
<213> Homo sapiens
<400> 481
Phe Ser Lys Pro Ser Ser Tyr Lys Thr Tyr Ile Pro Lys Ile Asn Leu
His Phe Tyr Ile Leu Leu Met Asn Ile Trp Glu Thr Ile Lys Ile Val
Pro Leu Asn Asn Cys Phe Thr Lys Met Asn Tyr Leu Gly Ile
                             40
<210> 482
<211> 14
<212> PRT
<213> Homo sapiens
<400> 482
Lys Lys Glu Thr Lys Leu Ser Leu Phe Ala Asn Asp Met Ile
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<210> 483
<211> 23
<212> PRT
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<213> Homo sapiens

<400> 483

Ser Pro Leu Leu Phe Asn Ile Leu Leu Glu Val Leu Ser Ser Ala Val 1 5 10 15

Arg Lys Glu Lys Glu Leu Lys 20

<210> 484 <211> 86

<212> PRT

<213> Homo sapiens

<400> 484

Leu Cys Ala Val Glu Lys Thr Arg Thr Phe Thr Arg Gly Asp Cys Gly 1 10 15

Pro Asn Arg His His Lys His Val Leu Lys Ala Lys Asp Asn Asn His

Ile Gln Arg His Gln Phe Ser Ser Thr Leu Glu Phe Ser Ser Asn Ser 35 40 45

Thr Asp Gly Leu Lys Tyr Ile Cys Val Tyr Leu Tyr Val Cys Thr His $50 \ \ 55 \ \ 60$

Pro Cys Ile Tyr Ile Tyr Leu Ser Ala His Thr Leu His Met Tyr Thr 65 70 75 80

His Tyr Leu Cys Lys Ile 85

<210> 485

<211> 30

<212> PRT

<213> Homo sapiens

<400> 485

Ser Ser Thr Leu Glu Phe Ser Ser Asn Ser Thr Asp Gly Leu Lys Tyr 1 $$ 10 $$ 15

Ile Cys Val Tyr Leu Tyr Val Cys Thr His Pro Cys Ile Tyr 20 25 30

<210> 486

<211> 69

<212> PRT

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<213> Homo sapiens
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<400> 486
Ser Thr Ser Val Cys Ile Cys Thr Cys Ala His Thr His Val Tyr Ile
Phe Ile Tyr Leu His Thr His Tyr Ile Cys Ile His Thr Ile Tyr Val
Lys Tyr Asn Ile Cys Ile Met His Ile Asn Ser Asn Lys Cys Ile Cys
Val Ile Phe Lys Ile Glu Gln Leu Tyr Leu Glu Val Val Asn Ala Glu
                        55
Asn Trp Phe Tyr Cys
65
<210> 487
<211> 31
<212> PRT
<213> Homo sapiens
<400> 487
Ile His Thr Ile Tyr Val Lys Tyr Asn Ile Cys Ile Met His Ile Asn
Ser Asn Lys Cys Ile Cys Val Ile Phe Lys Ile Glu Gln Leu Tyr
                                 25
<210> 488
<211> 9
<212> PRT
<213> Homo sapiens
<400> 488
Asn Ser Ala Val Thr Val Gln Met Ala
<210> 489
<211> 24
<212> PRT
<213> Homo sapiens
```

<400> 489 Lys Tyr Leu Val Ser Ser Val Leu Pro Thr Ile Ser Met Ala Arg Ser

Leu Ile Ser Ala Leu Arg Ser Gly 20

<210> 490 <211> 43

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
Val Xaa Asp Ile Thr Phe Asp Pro Asp Thr Ala His Lys Tyr Leu Arg
Leu Gln Glu Glu Asn Arg Lys Val Thr Asn Thr Thr Pro Trp Glu His
                                 25
Pro Tyr Pro Asp Leu Pro Ser Arg Phe Leu His
                             40
<210> 491
<211> 19
<212> PRT
<213> Homo sapiens
<400> 491
Leu Tyr Leu His Arg Tyr Tyr Phe Glu Val Glu Ile Phe Gly Ala Gly
                                     10
Thr Tyr Val
<210> 492
<211> 22
<212> PRT
<213> Homo sapiens
<400> 492
Ser Cys Ile Ser Gly Asn Asn Phe Ser Trp Ser Leu Gln Trp Asn Gly
Lys Glu Phe Thr Ala Trp
<210> 493
<211> 17
<212> PRT
<213> Homo sapiens
<400> 493
Thr Pro Leu Lys Ala Gly Pro Phe Trp Ser Ser Gly Ser Ile Leu Thr
                  5
                                    10
Ser
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<211> 38

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<210> 494
<211> 39
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 494
Ser Val Ser Glu Val Lys Ala Val Ala Glu Met Gln Phe Gly Glu Leu
Leu Ala Ala Val Arg Lys Ala Gln Ala Asn Val Met Leu Phe Leu Xaa
             20
                                 25
Glu Lys Glu Gln Ala Ala Leu
        35
<210> 495
<211> 43
<212> PRT
<213> Homo sapiens
<400> 495
Glu Lys Ser Lys Gln Glu Leu Glu Thr Met Ala Ala Ile Ser Asn Thr
                                     10
Val Gln Phe Leu Glu Glu Tyr Cys Lys Phe Lys Asn Thr Glu Asp Ile
                                 25
Thr Phe Pro Ser Val Tyr Ile Gly Leu Lys Asp
         35
<210> 496
<211> 29
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 496
Leu Glu Asn Tyr Lys Lys Lys Leu Gln Glu Phe Ser Lys Glu Glu Glu
Tyr Asp Ile Arg Thr Gln Val Ser Ala Xaa Val Gln Arg
<210> 497
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199
<212> PRT
<213> Homo sapiens
<400> 497
Gly Val Tyr Ile Asp Phe Pro Gly Gly Ile Leu Ser Phe Tyr Gly Val
Glu Tyr Asp Ser Met Thr Leu Val His Lys Phe Ala Cys Lys Phe Ser
                                 25
Glu Pro Val Tyr Ala Ala
        35
<210> 498
<211> 10
<212> PRT
<213> Homo sapiens
<400> 498
Gly Thr Val Ser Arg Glu Arg Arg Ala Gly
<210> 499
<211> 82
<212> PRT
<213> Homo sapiens
<400> 499
His Gly Asp Pro Thr Gln Ser Trp Pro Phe Leu Glu Leu Gly Val Tyr
Ile Asp Phe Pro Gly Gly Ile Leu Ser Phe Tyr Gly Val Glu Tyr Asp
Ser Met Thr Leu Val His Lys Phe Ala Cys Lys Phe Ser Glu Pro Val
Tyr Ala Ala Phe Trp Leu Ser Lys Lys Glu Asn Ala Ile Arg Ile Val
Asp Leu Gly Glu Glu Pro Glu Lys Pro Ala Pro Ser Leu Val Gly Thr
Ala Pro
<210> 500
<211> 30
<212> PRT
<213> Homo sapiens
<400> 500
Ser Phe Tyr Gly Val Glu Tyr Asp Ser Met Thr Leu Val His Lys Phe
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Ala Cys Lys Phe Ser Glu Pro Val Tyr Ala Ala Phe Trp Leu
20 25 30
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<210> 501
<211> 337
<212> PRT
<213> Homo sapiens
<220>
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<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (177)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (278)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (284)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 501
Ala Glu Leu Gln Cys Thr Gln Leu Asp Leu Glu Arg Lys Leu Lys Leu
Asn Glu Asn Ala Ile Ser Arg Leu Gln Ala Asn Gln Lys Ser Val Leu
Val Ser Val Ser Glu Val Lys Ala Val Ala Glu Met Gln Phe Gly Glu
Leu Leu Ala Ala Val Arg Lys Ala Gln Ala Asn Val Met Leu Phe Leu
Xaa Glu Lys Glu Gln Ala Ala Leu Ser Gln Ala Asn Gly Ile Lys Ala
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His Leu Glu Tyr Lys Ser Ala Glu Met Glu Lys Ser Lys Gln Glu Leu 85 90 95

Glu Thr Met Ala Ala Ile Ser Asn Thr Val Gln Phe Leu Glu Glu Tyr 100 105 110

Cys Lys Phe Lys Asn Thr Glu Asp Ile Thr Phe Pro Ser Val Tyr Ile 115 120 125

Gly Leu Lys Asp Lys Leu Ser Gly Ile Arg Lys Val Ile Thr Glu Ser 130 135 140

Thr Val His Leu Ile Xaa Xaa Leu Glu Asn Tyr Lys Lys Lys Leu Glu 145 \$150\$

Glu Phe Ser Lys Glu Glu Glu Tyr Asp Ile Arg Thr Gln Val Ser Ala 165 \$170\$

Xaa Val Gln Arg Lys Tyr Trp Thr Ser Lys Pro Glu Pro Ser Thr Arg 180 \$180\$

Glu Gln Phe Leu Gln Tyr Val Xaa Asp Ile Thr Phe Asp Pro Asp Thr 195 $$ 200 $$ 205

Ala His Lys Tyr Leu Arg Leu Gln Glu Glu Asn Arg Lys Val Thr Asn 210 215 220

Thr Thr Pro Trp Glu His Pro Tyr Pro Asp Leu Pro Ser Arg Phe Leu 225 230 235

His Trp Arg Gln Val Leu Ser Gln Gln Ser Leu Tyr Leu His Arg Tyr \$245\$

Tyr Phe Glu Val Glu Ile Phe Gly Ala Gly Thr Tyr Val Gly Leu Thr $_{\rm 260}$ $_{\rm 260}$

Cys Lys Gly Ile Asp Xaa Lys Gly Glu Glu Arg Xaa Ser Cys Ile Ser 275 280 285

Ala Trp Tyr Ser Asp Met Glu Thr Pro Leu Lys Ala Gly Pro Phe Trp 305 310 315

Ser Ser Gly Ser Ile Leu Thr Ser Gln Glu Gly Ser Phe Pro Ser Met 325 330 335

Ala

<210> 502

<211> 301

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (166)

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (250) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (299) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (300) <223> Xaa equals any of the naturally occurring L-amino acids <400> 502 Arg Thr Ala Pro Tyr Gly Ala Lys Glu Ser Ser Trp Arg Met Phe Ser Phe Arg Asp Pro Ile Gly Phe Gln Lys Pro Ala Thr Ile Ser Ser Tyr Phe Cys Pro Gln Ile Thr Leu Lys Cys Lys Ser His His Cys Ser Trp Gln Arg Ser Gly Ile Trp Leu Leu Glu Ser Arg Glu Gln Ser Pro Pro Arg Thr Val Leu Ala Ser Arg Val Pro Leu Pro Asp Leu Gln Ser Gly 65 Trp Arg Phe Pro Ser Trp Lys Ala Arg Arg Gln His Arg Leu Val Leu Lys Thr Cys Arg Gln Thr Cys Glu Pro Glu Ser Trp Asn His Thr Leu Arg His Arg Arg Lys Gly Ser Leu Leu Gly Ser Gln Tyr Arg Pro Arg 120 Ala Pro Glu Arg Ala Ser Phe Glu Trp Gly Leu His Val Thr Val Pro 135 Gly Arg Glu Leu Leu Pro Val Pro Leu Glu Ala Pro Gly Glu Val Val 155 150 Ser Gly Asn Ala Thr Xaa Ala Leu Leu Pro Phe Xaa Val Asp Ala Phe 165 Ala Gly Gln Ala Asn Ile Gly Ala Cys Pro Glu Asp Leu His Leu Lys 185

Ile Val Pro Val Gln Val Gln Thr Leu Leu Gly Gln His Leu Pro Pro

200

195

205

Val Gln Glu Pro Ala Gly Glu Val Arg Val Gly Met Leu Pro Gly Arg 210 215 220

Gly Val Gly Asp Leu Ala Val Leu Leu Leu Gln Pro Glu Ile Leu Val 225 $$ 230 $$ 235 $$ 240

Cys Cys Val Arg Val Glu Arg Asp Val Xaa His Ile Leu Glu Glu Leu 245 $$ 250 $$ 255

Phe Pro Gly Ala Gly Leu Arg Phe Gly Ser Pro Ile Phe Ala Leu Asn $260 \hspace{1.5cm} 265 \hspace{1.5cm} 265 \hspace{1.5cm} 270 \hspace{1.5cm}$

Asn Gly Arg His Leu Ser Ser Asp Val Ile Leu Leu Phe Leu Gly Lys

Leu Leu Glu Leu Phe Leu Ile Val Leu Gln Xaa Xaa Asp 290 295 300

<210> 503

<211> 196

<212> PRT

<213> Homo sapiens

<400> 503

Ser Lys Ile Lys Tyr Asp Trp Tyr Gln Thr Glu Ser Gln Val Val Ile 1 5 10 15

Thr Leu Met Ile Lys Asn Val Gln Lys Asn Asp Val Asn Val Glu Phe 20 25 30

Ser Glu Lys Glu Leu Ser Ala Leu Val Lys Leu Pro Ser Gly Glu Asp 35 40 45

Tyr Asn Leu Lys Leu Glu Leu Leu His Pro Ile Ile Pro Glu Gln Ser

Thr Phe Lys Val Leu Ser Thr Lys Ile Glu Ile Lys Leu Lys Lys Pro

Glu Ala Val Arg Trp Glu Lys Leu Glu Gly Gln Gly Asp Val Pro Thr

Pro Lys Gln Phe Val Ala Asp Val Lys Asn Leu Tyr Pro Ser Ser Ser 100 105 110

Pro Tyr Thr Arg Asn Trp Asp Lys Leu Val Gly Glu Ile Lys Glu Glu 115 \$120\$

Glu Lys Asn Glu Lys Leu Glu Gly Asp Ala Ala Leu Asn Arg Leu Phe 130 140

Gln Gln Ile Tyr Ser Asp Gly Ser Asp Glu Val Lys Arg Ala Met Asn 145 150 155 160

Lys Ser Phe Met Glu Ser Gly Gly Thr Val Leu Ser Thr Asn Trp Ser 165 170 175

Asp Val Gly Lys Arg Lys Val Glu Ile Asn Pro Pro Asp Asp Met Glu

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TOUTENT BARKAGED
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180
                               185
                                                    190
Trp Lys Lys Tyr
       195
<210> 504
<211> 39
<212> PRT
<213> Homo sapiens
<400> 504
Gly Asp Ala Ala Leu Asn Arg Leu Phe Gln Gln Ile Tyr Ser Asp Gly
Ser Asp Glu Val Lys Arg Ala Met Asn Lys Ser Phe Met Glu Ser Gly
                                 25
Gly Thr Val Leu Ser Thr Asn
         35
<210> 505
<211> 23
<212> PRT
<213> Homo sapiens
<400> 505
Asp Trp Tyr Gln Thr Glu Ser Gln Val Val Ile Thr Leu Met Ile Lys
                                     10
Asn Val Gln Lys Asn Asp Val
             2.0
<210> 506
<211> 146
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 506
Met Ala Ala Ala Ala Gly Thr Xaa Xaa Ser Gln Arg Phe Phe Gln
Ser Phe Ser Asp Ala Leu Ile Asp Glu Asp Pro Gln Ala Ala Leu Glu
             20
                                  25
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Glu Leu Thr Lys Ala Leu Glu Gln Lys Pro Asp Asp Ala Gln Tyr Tyr

Cys Gln Arg Ala Tyr Cys His Ile Leu Leu Gly Asn Tyr Cys Val Ala 50 55 60

Val Ala Asp Ala Lys Lys Ser Leu Glu Leu Asn Pro Asn Asn Ser Thr 65 70 75 80

Ala Met Leu Arg Lys Gly Ile Cys Glu Tyr His Glu Lys Asn Tyr Ala 85 90 95

Ala Ala Leu Glu Thr Phe Thr Glu Gly Gln Lys Leu Asp Ser Ala Asp $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110 \hspace{1.5cm}$

Ala Asn Phe Ser Val Trp Ile Lys Arg Cys Gln Glu Ala Gln Asn Gly 115 120 125

Ser Glu Ser Glu Val Val Ser Pro Lys Phe Ser Phe Phe Met Phe Leu 130 $$135\$

Leu Phe 145

<210> 507 <211> 38

<212> PRT <213> Homo sapiens

<400> 507

Leu Glu Glu Leu Thr Lys Ala Leu Glu Gln Lys Pro Asp Asp Ala Gln 1 5 10 15

Tyr Tyr Cys Gln Arg Ala Tyr Cys His Ile Leu Leu Gly Asn Tyr Cys 20 25 30

Val Ala Val Ala Asp Ala 35

<210> 508

<211> 31

<212> PRT

<213> Homo sapiens

<400> 508

Ala Met Leu Arg Lys Gly Ile Cys Glu Tyr His Glu Lys Asn Tyr Ala 1 $$ 5 $$ 10 $$ 15

Ala Ala Leu Glu Thr Phe Thr Glu Gly Gln Lys Leu Asp Ser Ala 20 25 30

<210> 509

<211> 37

<211> 37 <212> PRT

<213> Homo sapiens

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206
<400> 509
Leu Arg Leu Trp Asn Arg Asn Gln Met Met His Ser Ile Ile Val Lys
Glu Leu Ile Val Thr Phe Phe Leu Gly Ile Thr Val Leu Leu Leu Leu
                                 25
Met Gln Arg Ser Leu
         35
<210> 510
<211> 10
<212> PRT
<213> Homo sapiens
<400> 510
Asn Ser Ile Gln Ile Ile Pro Leu Leu Cys
<210> 511
<211> 228
<212> PRT
<213> Homo sapiens
<400> 511
Tyr Met His Phe Asn Asn Thr Val Ala Lys Leu Thr Cys Lys Asn Leu
                 5
Ser Leu Ser Thr Tyr Gln Asn Gln Ser Ala Ser Gln Trp Thr His Gln
                                 25
Ser Lys Ile Lys Tyr Asp Trp Tyr Gln Thr Glu Ser Gln Val Val Ile
         35
Thr Leu Met Ile Lys Asn Val Gln Lys Asn Asp Val Asn Val Glu Phe
                         55
Ser Glu Lys Glu Leu Ser Ala Leu Val Lys Leu Pro Ser Gly Glu Asp
Tyr Asn Leu Lys Leu Glu Leu Leu His Pro Ile Ile Pro Glu Gln Ser
Thr Phe Lys Val Leu Ser Thr Lys Ile Glu Ile Lys Leu Lys Lys Pro
            100
Glu Ala Val Arg Trp Glu Lys Leu Glu Gly Gln Gly Asp Val Pro Thr
Pro Lys Gln Phe Val Ala Asp Val Lys Asn Leu Tyr Pro Ser Ser Ser
Pro Tyr Thr Arg Asn Trp Asp Lys Leu Val Gly Glu Ile Lys Glu Glu
                    150
                                        155
```

Glu Lys Asn Glu Lys Leu Glu Gly Asp Ala Ala Leu Asn Arg Leu Phe

165

207 Gln Gln Ile Tyr Ser Asp Gly Ser Asp Glu Val Lys Arg Ala Met Asn 185 Lys Ser Phe Met Glu Ser Gly Gly Thr Val Leu Ser Thr Asn Trp Ser Asp Val Gly Lys Arg Lys Val Glu Ile Asn Pro Pro Asp Asp Met Glu 215 Trp Lys Lys Tyr 225 <210> 512 <211> 29 <212> PRT <213> Homo sapiens <400> 512 Thr Cys Lys Asn Leu Ser Leu Ser Thr Tyr Gln Asn Gln Ser Ala Ser Gln Trp Thr His Gln Ser Lys Ile Lys Tyr Asp Trp Tyr <210> 513 <211> 24 <212> PRT <213> Homo sapiens <400> 513 Glu Lys Glu Leu Ser Ala Leu Val Lys Leu Pro Ser Gly Glu Asp Tyr 10 Asn Leu Lys Leu Glu Leu Leu His 20 <210> 514 <211> 29 <212> PRT <213> Homo sapiens <400> 514 Leu His Pro Ile Ile Pro Glu Gln Ser Thr Phe Lys Val Leu Ser Thr Lys Ile Glu Ile Lys Leu Lys Lys Pro Glu Ala Val Arq 20

<210> 515 <211> 24 <212> PRT <213> Homo sapiens

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<400> 515
 Lys Gln Phe Val Ala Asp Val Lys Asn Leu Tyr Pro Ser Ser Ser Pro
 Tyr Thr Arg Asn Trp Asp Lys Leu
 <210> 516
 <211> 45
 <212> PRT
 <213> Homo sapiens
<400> 516
 Ser Ile Leu Pro Val Glu Met Ala Ala Ala Val Ala Gly Met Leu Arg
 Gly Gly Leu Leu Pro Gln Ala Gly Arg Leu Pro Thr Leu Gln Thr Val
 Arg Tyr Gly Ser Lys Ala Val Thr Arg His Arg Arg Val
<210> 517
<211> 26
<212> PRT
<213> Homo sapiens
 <400> 517
 Ala Gly Met Leu Arg Gly Gly Leu Leu Pro Gln Ala Gly Arg Leu Pro
 Thr Leu Gln Thr Val Arg Tyr Gly Ser Lys
             20
<210> 518
 <211> 52
 <212> PRT
<213> Homo sapiens
<220>
<221> SITE
 <222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids
 <400> 518
 Asp Cys Asn Arg Asp Tyr His Lys Ala Phe Gly Asn Leu Arg Ser Pro
Gly Trp Pro Asp Asn Tyr Asp Asn Asp Xaa Asp Cys Xaa Val Thr Leu
```

Trp Thr Val His Val Asp Phe Ala

ngazaeza icioi

```
Thr Ala Pro Gln Asn His His Ser Gly Ile Val Glu Asn Ala Glu Thr
 Ile Ser Trp Arg
      50
 <210> 519
 <211> 15
 <212> PRT
 <213> Homo sapiens
 <400> 519
 Phe Gly Asn Leu Arg Ser Pro Gly Trp Pro Asp Asn Tyr Asp Asn
                   5
<210> 520
<211> 16
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 520
 Ala Pro Gln Asn His Xaa Leu Lys Cys Arg Asn Asp Phe Leu Glu Val
                  5
                                      10
 <210> 521
 <211> 7
 <212> PRT
 <213> Homo sapiens
 <400> 521
 Ala Ser Phe Tyr Arg Thr Ser
 <210> 522
 <211> 24
 <212> PRT
 <213> Homo sapiens
 Met Gly Glu Ser Glu Cys Tyr Arg Arg Leu Ser Gly Ala Ser Cys Thr
                   5
```

```
<210> 523
<211> 33
<212> PRT
<213> Homo sapiens
<400> 523
Met His Cys Gly Thr Arg Val Trp Lys Thr Met Lys His Asp Tyr Phe
Leu Leu Ala Cys Leu Ser Met Thr Ser Thr Gly Gly Ile Leu Cys Thr
                                 25
Leu
<210> 524
<211> 67
<212> PRT
<213> Homo sapiens
<400> 524
Ser Thr Leu Ser Leu Ile Pro Thr Ser Ser Ser Leu Ser Phe Trp Pro
Trp Cys Thr Ala Ile Ile Gly Ser Ile Phe Thr Tyr Cys Val Cys Val
Cys Val Cys Phe Val Val Met Asn Arg Thr Cys Tyr Leu Pro Asn Ser
         35
Ile Ile Tyr His Asn Ser Lys Leu Ala Thr Ile Ile Asp Lys Ser Met
                         55
Thr Leu Ser
 65
<210> 525
<211> 20
<212> PRT
<213> Homo sapiens
<400> 525
Met Trp Ile Leu Pro Lys Val Ser Leu Ile Cys Ile Val Glu Leu Gly
                                      10
Tyr Gly Lys Pro
```

<210> 526 <211> 40 <212> PRT <213> Homo sapiens

<400> 526

Met Cys Val Thr Arg Met His Val Lys Cys Pro Pro Pro Ser Ala Ser 1 5 10 15

Val Thr Ala Val Lys Trp Pro Leu Ser Trp Ser Ser Ser Ser Phe Cys
20 25 30

Ile Ser Leu His Ala Gly Arg His

<210> 527

<211> 36 <212> PRT

<213> Homo sapiens

<400> 527

Glu Glu Arg Asn Lys Asn His Leu Ser Cys Gln Gly Leu Ser Thr Ile

Cys Cys Ser Tyr Leu Ser Ser Lys Gly Glu His Leu Arg Asn Leu Ser

Pro Tyr Ser Phe

<210> 528

<211> 46

<212> PRT

<213> Homo sapiens

<400> 528

Cys Cys Asn Tyr Pro Tyr Ile Ala Asp Lys Asp Ile Glu Thr Glu Val \$20\$

Lys Pro Pro Ser Gln Gly His Thr Trp His Leu His Cys Ser

<210> 529

<211> 75

<212> PRT <213> Homo sapiens

<400> 529 Gln Leu Trp Cys Ile Thr Ala Leu Pro Ser Thr Arg His Cys Ser Lys 1 5 10 15

Gly Phe Ala Trp Phe Thr His Ser Leu Arg His Pro Ser Val Ala Gly 20 25 30

Ala Val Ile Ile Leu Ile Leu Gln Thr Arg Thr Leu Arg Gln Arg Ser

Ser His Leu Pro Lys Gly Thr His Gly Ile Cys Thr Ala Pro Asp Arg Pro Thr Glu Arg Ala Ala Val Thr Ile Leu Lys

40

<210> 530 <211> 39

<212> PRT <213> Homo sapiens

<400> 530

Ser Phe Asp Asn Asn Asn Ser Tyr Gly Val Ser Gln Leu Tyr Gln Val

Pro Asp Thr Val Leu Arg Ala Leu His Gly Ser Leu Thr Pro Tyr Val

Ile Pro Arg Trp Gln Val Leu 35

<210> 531

<211> 38

<212> PRT

<213> Homo sapiens

<400> 531

Asp Arg Gly Gln Ala Thr Phe Pro Arg Ala His Met Ala Ser Ala Leu

Leu Leu Thr Asp Arg Gln Arg Glu Leu Leu Ser Arg Ser Ser Asn Glu 25

Leu Cys Met Ser Lys Val 35

<210> 532

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE <222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 532

Leu Leu Leu Ile Leu Arg Pro Phe Leu Asn Ser Gln Phe Lys Leu Gln

Leu Pro Leu Val Leu Phe His Ser Ser Cys Thr Tyr Ile Cys Leu Leu 25

Tyr Asn Tyr Glu Leu Phe His Ile Val Ala Leu Thr Gly Lys Leu Met 35 40 45

Asn Leu Gly Leu His Leu Phe Ala His His Leu Ile Leu Ala Val Ala 50 $\,$

His Xaa Gly Cys Ser Ile Pro Ile Tyr

<210> 533

<211> 37

<212> PRT <213> Homo sapiens

<400> 533

Thr His Asn Ser Asn Tyr Ser Ser Leu Trp Phe Ser Ser Thr Ala Val 1 5 10 15

Val Leu Thr Tyr Val Tyr Tyr Ile Ile Met Asn Cys Phe Ile Leu Ser 20 25 30

Pro Leu Gln Val Asn

<210> 534

<211> 187

<212> PRT

<213> Homo sapiens

<400> 534

Ala Lys Asn Ser Gln Lys Glu Glu Asn Pro Glu His Val Glu Ile Gln 1 5 10 15

Lys Met Met Asp Ser Leu Phe Leu Lys Leu Asp Ala Leu Ser Asn Phe 20 25 30

His Phe Ile Pro Lys Pro Pro Val Pro Glu Ile Lys Val Val Ser Asn \$35\$

Leu Pro Ala Ile Thr Met Glu Glu Val Ala Pro Val Ser Val Ser Asp
50 55 60

Ala Ala Leu Leu Ala Pro Glu Glu Ile Lys Glu Lys Asn Lys Ala Gly 65 70 75 80

Asp Ile Lys Thr Ala Ala Glu Lys Thr Ala Thr Asp Lys Lys Arg Glu 85 90 95

Arg Arg Lys Lys Lys Tyr Gln Lys Arg Met Lys Ile Lys Glu Lys Glu 100 105 110

Lys Arg Arg Lys Leu Leu Glu Lys Ser Ser Val Asp Gln Ala Gly Lys 115 120 125

Tyr Ser Lys Thr Val Ala Ser Glu Lys Leu Lys Gln Leu Thr Lys Thr 130 135 140

214 Gly Lys Ala Ser Phe Ile Lys Val Arg Thr Arg Glu Arg Lys Leu Leu 145 Lys Gly Thr Phe Val Gly Glu Val Asp Ser Lys Cys Trp Val Thr Gly Met Ser Glu Pro Ala Asp Ser Pro Pro Val Gly <210> 535 <211> 51 <212> PRT <213> Homo sapiens <400> 535 Leu Gln Asp Glu Gly Lys Asp Lys Ala Leu Lys Ser Ser Gln Ala Phe Phe Ser Lys Leu Gln Asp Gln Val Lys Met Gln Ile Asn Asp Ala Lys Lys Thr Glu Lys Lys Lys Lys Arg Gln Asp Ile Ser Val His Lys Leu Lys Leu 50 <210> 536 <211> 29 <212> PRT <213> Homo sapiens <400> 536 Asp Glu Gly Lys Asp Lys Ala Leu Lys Ser Ser Gln Ala Phe Phe Ser Lys Leu Gln Asp Gln Val Lys Met Gln Ile Asn Asp Ala 25 <210> 537 <211> 28 <212> PRT <213> Homo sapiens <400> 537 Glu Glu Asn Pro Glu His Val Glu Ile Gln Lys Met Met Asp Ser Leu

Phe Leu Lys Leu Asp Ala Leu Ser Asn Phe His Phe 20 25

<210> 538 <211> 13

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215
<212> PRT
<213> Homo sapiens
<400> 538
Ser Asn Leu Pro Ala Ile Thr Met Glu Glu Val Ala Pro
     5
<210> 539
<211> 31
<212> PRT
<213> Homo sapiens
<400> 539
Ser Ser Val Asp Gln Ala Gly Lys Tyr Ser Lys Thr Val Ala Ser Glu
Lys Leu Lys Gln Leu Thr Lys Thr Gly Lys Ala Ser Phe Ile Lys
                                 25
<210> 540
<211> 23
<212> PRT
<213> Homo sapiens
<400> 540
Val Ser Val Ser Asp Ala Ala Leu Leu Ala Pro Glu Glu Ile Lys Glu
                                    10
 Lys Asn Lys Ala Gly Asp Ile
 <210> 541
 <211> 11
 <212> PRT
 <213> Homo sapiens
 <400> 541
 Val Leu Glu Val Met Val Thr Val Ala Pro Lys
 <210> 542
 <211> 35
 <212> PRT
 <213 > Homo sapiens
 <400> 542
 Leu Gln Asp Glu Gly Lys Asp Lys Ala Leu Lys Ser Ser Gln Ala Phe
 Phe Ser Lys Leu Gln Asp Gln Val Lys Met Gln Ile Asn Asp Ala Lys
              20
 Lys Thr Glu
```

35

```
<210> 543
<211> 18
<212> PRT
<213> Homo sapiens
<400> 543
Val Lys Pro Pro Asp Gln Ser Cys Asn His Trp Arg Asp Glu Gln Cys
Leu Val
<210> 544
<211> 25
<212> PRT
<213> Homo sapiens
<400> 544
Met Leu Tyr Leu Ile Leu Ile Ser Leu Ser Ser Leu Ser Phe Ser Phe
                                    10
            5
Ser Leu Pro Pro Phe Ser Ile Ile Ile
            20
<210> 545
<211> 24
<212> PRT
<213> Homo sapiens
<400> 545
Ser Ser Tyr Phe Leu Arg His Phe Arg Ile Tyr His Thr Cys Pro Lys
                                     10
Tyr Phe Ser Met Asn Ile Ile Asn
             20
<210> 546
<211> 69
 <212> PRT
<213> Homo sapiens
 <400> 546
 Lys Leu Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val
 Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala
              20
 Arg Asp Ser Leu Pro Asn Ser Thr Met Met Phe Tyr Tyr Ala Cys Phe
```

40

```
Ile Leu Tyr Ser Ser Leu Ser Pro Leu Ser Leu Ser Leu Ser Pro Ser
                                            60
Leu Leu Ser Leu Leu
<210> 547
<211> 14
<212> PRT
<213> Homo sapiens
<400> 547
Gln Phe His Thr Gly Asn Ser Tyr Asp His Asp Tyr Ala Lys
                                    10
                 5
<210> 548
<211> 22
<212> PRT
<213> Homo sapiens
<400> 548
Ile Arg His Glu Glu Ser Phe Asn Pro Leu Thr Cys Gly Phe Ser Leu
Phe Phe Ser Leu Phe Ser
             20
<210> 549
<211> 27
<212> PRT
<213> Homo sapiens
<400> 549
Met Glu Thr Leu Leu Leu Leu Phe Phe Leu Ser Leu Leu Ile Phe
                                     10
Arg Phe Arg Ile Leu Val Ser Gln Cys Ile Asn
             20
                                  25
<210> 550
 <211> 65
 <212> PRT
<213> Homo sapiens
 <400> 550
 Phe Leu Leu Thr Thr Val Leu Leu Phe Ser Ser Lys Val Arg Asp Pro
  1
 Arg Ala Asn Phe Asp Gln Ser Leu Arg Val Leu Lys His Ala Lys Lys
 Val Gln Pro Asp Val Ile Ser Lys Thr Ser Ile Met Leu Gly Leu Gly
          35
```

```
Glu Asn Asp Glu Gln Val Tyr Ala Thr Met Lys Gly Lys Glu Ile Glu
                                             60
                         55
Lys
65
<210> 551
<211> 23
<212> PRT
<213> Homo sapiens
<400> 551
Gln Gln Ser Cys Cys Phe Pro Val Arg Phe Val Ile Leu Gly Pro Ile
Leu Ile Ser Pro Tyr Val Tyr
             20
<210> 552
<211> 42
<212> PRT
<213> Homo sapiens
<400> 552
Met Phe Tyr Ser Lys Ile Phe Tyr Phe Leu Leu Leu Asn Ser Asp Thr
Ser Asn Asn Val Thr Ser Lys Thr Leu Val Ser Ser Ile Ser Ser Ser
Asn Asn Arg Leu Ala Val Ser Ile Val Phe
<210> 553
<211> 47
 <212> PRT
 <213> Homo sapiens
 <400> 553
 Ser Arg Gln Lys Asn Leu Leu Lys Leu His Ser Asn Pro Asn Cys Asp
 Asn Phe Cys Phe Ile Phe Asn Tyr Lys Pro Lys Tyr Ile Cys Ile Phe
              20
 Lys Leu Ile Cys Leu Lys Ile Leu Leu Tyr Ile Phe Gly Ser Gly
                              40
 <210> 554
 <211> 56
 <212> PRT
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<213> Homo sapiens

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<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 554
Met Leu Leu Ser Leu Leu Met Val Phe Thr Ser Glu Leu Tyr Val Lys
                                     1.0
Arg His Ile Ser Phe Lys Ser Xaa Asp Lys Pro His Cys His Lys Asn
Gln Asp Ile Asp Val Leu Phe Arg Lys Leu Leu Glu Lys His Phe Lys
         35
Val Ile Asn Met Ile Cys Phe Pro
     50
<210> 555
<211> 12
<212> PRT
<213> Homo sapiens
<400> 555
Phe Arg Glu Tyr Gly Phe Tyr Asn Leu His Phe Cys
<210> 556
<211> 38
<212> PRT
<213> Homo sapiens
<400> 556
Leu Val Thr Thr Asp Tyr Tyr Asp Gly Cys Asn Glu Asp Tyr Glu Tyr
Asn Trp Ser Tyr Met Phe Leu Asn Ser Glu Gln Leu Phe Ile Lys Phe
              20
                                  25
Tyr Pro Thr Phe Phe Cys
         35
<210> 557
 <211> 52
<212> PRT
 <213> Homo sapiens
<400> 557
 Asn Val Ile Ala Pro Gly Leu Glu Ser Ser Cys Ala Asn Ser Leu Phe
 Leu Leu Phe Val Cys Leu Pro Val Ala His His Arg His Asn Phe Leu
              20
```

```
220
Phe Ile Lys His Ser Leu Tyr Asn His Leu Arg Asp Tyr Glu Ser Asp
Phe Asp Lys Ile
     50
<210> 558
<211> 82
<212> PRT
<213> Homo sapiens
<400> 558
Leu Asn Ile Asp Ser Phe Asp Tyr Gly Lys Phe Glu Ser Leu Leu Ala
Lys Gln His Tyr Lys Phe Ser Phe Leu Leu Pro Leu Ala Ala Gly Thr
                                 25
Glu Arg Cys Lys Trp Trp Leu Lys Ile Glu Glu Ala Ser Ser Asp Gln
Cys Gly Cys Trp Phe Leu Val Lys Cys Val Pro Lys Pro Pro Ser Pro
Cys Arg Gln Pro Pro Thr Gln Val Ser Lys Ile Gly His Ala Pro Phe
65
Phe Leu
<210> 559
<211> 52
<212> PRT
<213> Homo sapiens
<400> 559
Gln Glu Phe Gln Thr Gly Leu Gly Asn Met Val Lys Pro Cys Leu Tyr
Glu Lys Tyr Arg Asn Ile Ser Trp Leu Trp Trp His Thr Pro Val Val
Pro Ala Thr Trp Glu Ala Glu Val Gly Ser Leu Glu Pro Gly Arg
Leu Arg Leu Gln
     50
<210> 560
<211> 65
<212> PRT
<213> Homo sapiens
```

<400> 560

Ile Leu Gly Gly Glu Ser Ile Leu Ile Leu Ser Trp Val Phe Ser Tyr

Ser Pro Phe Cys Leu Gly Arg Trp Leu Met Pro Val Ile Pro Ala Leu 35 40 45

Trp Glu Ala Glu Val Gly Gly Leu Pro Glu Leu Arg Ser Ser Arg Pro

Ala 65

<210> 561 <211> 45

<212> PRT

<213> Homo sapiens

<400> 561

DOGYBEYS . IDIDD1

Val Leu Cys Glu Glu Ala Gly Gln Lys Val Pro Ser Thr Pro Ser Trp 1 5 10 15

Ser Ser Trp Thr Leu Gln Lys Arg Leu Arg Gly Ser Pro Ala Glu Ala $20 \hspace{1cm} 25 \hspace{1cm} 30 \hspace{1cm}$

Asn Cys Ser Pro Ser Phe Pro Ala Pro Pro Gly Lys Glu \$35\$ 40 45

<210> 562

<211> 103

<212> PRT

<213> Homo sapiens

<400> 562

Met Ser Leu Ser Ala Leu Ala Cys Asp Phe Thr Pro Ile Gln Pro Trp 1 5 10 15

Glu Trp Glu Glu Tyr Glu Gln Ile Thr Leu Gly Leu Thr Ala Pro Ser $20 \ 25 \ 30$

Asn Leu Leu Glu Ser Asn Tyr Leu Gly Gln Ala Ser Glu Cys Phe Val\$35\$

Arg Lys Leu Val Arg Arg Phe Pro Gln Leu Leu Pro Gly Pro Pro Gly 50 60

His Cys Arg Lys Asp Leu Gly Asp Pro Gln Gln Arg Pro Ile Ala Leu 65 70 75 80

Leu Pro Ser Leu Pro His Gln Glu Arg Asn Asn Val His Arg Leu Glu 85 90 95

Ala Asp Ser Glu Val Asp Leu

```
<210> 563
<211> 46
<212> PRT
<213> Homo sapiens
<400> 563
Cys Val Asp Phe Asp Glu Tyr Phe Ser Ser Trp Glu Pro Leu Leu Lys
Met Met Phe Lys Gly Val Val Gly Gly Lys Met Lys Ala Trp Arg Arg
                                 25
Lys Lys Arg Arg Lys Pro Leu Pro Tyr Lys Ile His Ala Asp
                             40
<210> 564
<211> 30
<212> PRT
<213> Homo sapiens
<400> 564
Met Met Phe Lys Gly Val Val Gly Gly Lys Met Lys Ala Trp Arg Arg
Lys Lys Arg Arg Lys Pro Leu Pro Tyr Lys Ile His Ala Asp
             20
<210> 565
<211> 162
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 565
Xaa Leu Trp Asp Pro Gly Leu Pro Gly Val Cys Arg Cys Gly Ser Ile
Val Leu Lys Ser Ala Phe Ser Val Gly Ile Thr Thr Ser Tyr Pro Glu
Xaa Arg Leu Pro Ile Ile Phe Asn Lys Val Leu Leu Pro Arg Gly Xaa
         35
                             40
```

```
Ala Leu Gln Pro Cys His Arg Gly Ser Ser Ser Val Leu Ser Gln Gly
Ile Tyr Tyr Phe Ser Tyr Asp Ile Thr Leu Ala Asn Lys His Leu Ala
Ile Gly Leu Val His Asn Gly Gln Tyr Arg Ile Lys Thr Phe Asp Ala
Asn Thr Gly Asn His Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu
Gln Pro Glu Asp Glu Val Trp Leu Glu Ile Phe Phe Thr Asp Gln Asn
                            120
Gly Leu Phe Ser Asp Pro Gly Trp Ala Asp Ser Leu Phe Ser Gly Phe
                        135
Leu Leu Tyr Val Asp Thr Asp Tyr Leu Asp Ser Ile Ser Glu Asp Asp
145
                    150
                                        155
Glu Leu
<210> 566
<211> 15
<212> PRT
<213> Homo sapiens
<400> 566
Gly Ser Ile Val Leu Lys Ser Ala Phe Ser Val Gly Ile Thr Thr
<210> 567
<211> 14
<212> PRT
<213> Homo sapiens
<400> 567
Gly Ile Tyr Tyr Phe Ser Tyr Asp Ile Thr Leu Ala Asn Lys
<210> 568
<211> 13
<212> PRT
<213> Homo sapiens
```

Asp Ser Leu Phe Ser Gly Phe Leu Leu Tyr Val Asp Thr

```
<211> 13
<212> PRT
<213> Homo sapiens
<400> 569
Asn His Asp Val Ala Ser Gly Ser Thr Val Ile Tyr Leu
<210> 570
<211> 10
<212> PRT
<213> Homo sapiens
<400> 570
Ile Thr Pro Leu Gly Leu Gly Ala Ala Asp
     5
<210> 571
<211> 149
<212> PRT
<213> Homo sapiens
<400> 571
Thr Leu Arg Val Leu Gly Lys Val Pro Ala Val Cys Pro Trp Cys Ala
Leu Trp Arg Lys Ala Gly Met Asp Met Thr Tyr Ser Trp Leu Ser Arg
                                25
Gly Asp Ser Thr Tyr Thr Phe His Glu Gly Pro Val Leu Ser Thr Ser
Trp Arg Pro Gly Asp Ser Ala Leu Ser Tyr Thr Cys Arg Ala Asn Asn
Pro Ile Ser Asn Val Ser Ser Cys Pro Ile Pro Asp Gly Pro Phe Tyr
Ala Asp Pro Asn Tyr Ala Ser Glu Lys Pro Ser Thr Ala Phe Cys Leu
Leu Ala Lys Gly Leu Leu Ile Phe Leu Leu Leu Val Ile Leu Ala Met
Gly Leu Trp Val Ile Arg Val Gln Lys Arg His Lys Met Pro Arg Met
Lys Lys Leu Met Arg Asn Arg Met Lys Leu Arg Lys Glu Ala Lys Pro
                       135
Gly Ser Ser Pro Ala
145
<210> 572
<211> 21
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<212> PRT
<213> Homo sapiens
<400> 572
Ala Val Cys Pro Trp Cys Ala Leu Trp Arg Lys Ala Gly Met Asp Met
Thr Tyr Ser Trp Leu
            2.0
<210> 573
<211> 24
<212> PRT
<213> Homo sapiens
<400> 573
Pro Gly Asp Ser Ala Leu Ser Tyr Thr Cys Arg Ala Asn Asn Pro Ile
                             10
Ser Asn Val Ser Ser Cys Pro Ile
            20
<210> 574
<211> 24
<212> PRT
<213> Homo sapiens
<400> 574
Tyr Ala Ser Glu Lys Pro Ser Thr Ala Phe Cys Leu Leu Ala Lys Gly
Leu Leu Ile Phe Leu Leu Val
             20
<210> 575
<211> 26
<212> PRT
<213> Homo sapiens
<400> 575
Gln Lys Arg His Lys Met Pro Arg Met Lys Lys Leu Met Arg Asn Arg
Met Lys Leu Arg Lys Glu Ala Lys Pro Gly
<210> 576
<211> 29
<212> PRT
<213> Homo sapiens
<400> 576
Leu Ser Tyr Ser Val Leu Leu Ile Leu Pro Leu Phe His Ser Leu Pro
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Thr Leu Lys Asp Thr His Thr His Asn Lys Trp Val Glu

5

<210> 577 <211> 61

<212> PRT

<213> Homo sapiens

Glu Val Asn Gly Val Gly Tyr Lys His Ser Cys Phe Ser Asp Ile Ser

Ser Val Leu Glu Asn Lys Asp Ser Arg Met Arg Ala Pro His Tyr Ala 25

Ser Phe Gln His Phe Phe Ser Val Leu Leu Lys Leu Ser Pro Gln Ala 40

Cys Leu Thr Glu Ser Gln Cys Ile Pro Leu Thr Phe Tyr 55

<210> 578

CODYNAMIA TOTOL

<211> 37

<212> PRT

<213> Homo sapiens

<400> 578

Lys Thr His Thr His Thr Ile Ser Gly Trp Ser Lys Lys Ser Thr Glu

Leu Asp Ile Ser Ile Pro Ala Phe Leu Thr Ser Pro Val Ser Trp Arg 25

Thr Arg Ile Leu Glu 35

<210> 579

<211> 29 <212> PRT

<213> Homo sapiens

<400> 579

Ile Arg His Glu Leu Gly Ser Ser Asp Pro Pro Ala Glu Ala Ser Gln

Ile Ala Gly Thr Ala Ala Val Ser His His Ala Gln Pro 20

<210> 580

<211> 109

<212> PRT

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227
<213> Homo sapiens
<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 580
Leu Lys Gly Arg Glu Ala Gly Ala Gly Pro Gly Thr Ala Gly Ala Pro
Gly Arg Glu Asp Ala Asn Gly Xaa Xaa Arg Gly Arg Gly Kaa His
Gln Leu Tyr Leu Trp Val Asp Asn Ile Pro Leu Ser Arg Pro Lys Arg
                              40
Asn Leu Ser Arg Asp Phe Ser Asp Gly Val Leu Val Ala Glu Val Ile
Lys Phe Tyr Phe Pro Lys Met Val Glu Met His Asn Tyr Val Gly Thr
 Ser Ser Leu Gln Gln Lys Leu Ser Asn Trp Gly His Leu Asn Arg Lys
                                      90
 Val Leu Lys Arg Leu Asn Phe Ser Val Pro Asp Asp Val
             100
                                 105
 <210> 581
 <211> 25
 <212> PRT
 <213> Homo sapiens
 <400> 581
 Trp Val Asp Asn Ile Pro Leu Ser Arg Pro Lys Arg Asn Leu Ser Arg
 Asp Phe Ser Asp Gly Val Leu Val Ala
              2.0
 <210> 582
 <211> 25
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<212> PRT <213 > Homo sapiens

<400> 582

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228
Tyr Val Gly Thr Ser Ser Leu Gln Gln Lys Leu Ser Asn Trp Gly His
Leu Asn Arg Lys Val Leu Lys Arg Leu
<210> 583
<211> 97
<212> PRT
<213> Homo sapiens
<400> 583
Gly Ser Ala Trp Arg Arg Gly Arg Gly Ala Gly Ser Arg Ala Pro Ala
Pro Tyr Arg Ser Trp Leu Pro Arg Met Ala Val Ala Thr Trp Met Trp
Val Tyr Pro Arg Arg Pro Glu Val Lys Val Ser Arg Thr Pro Arg Glu
                             40
Gly Val Ser Ser Ala Gly Thr Gly Arg Arg Arg Leu Gly Leu Gln Arg
                         55
Ile Thr Gly Arg Cys Arg Ala Thr Pro Ala Ser Ser Arg Ser Leu
Lys Arg Ser Arg Ser Cys Trp Pro Leu Lys Arg Pro Cys Arg Ser Cys
Arg
<210> 584
<211> 21
<212> PRT
<213 > Homo sapiens
<400> 584
Trp Leu Pro Arg Met Ala Val Ala Thr Trp Met Trp Val Tyr Pro Arg
                                      10
Arg Pro Glu Val Lys
              20
<210> 585
<211> 23
<212> PRT
<213> Homo sapiens
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Cys Arg Ala Thr Pro Ala Ser Ser Ser Arg Ser Leu Lys Arg Ser Arg

1 5
Ser Cys Trp Pro Leu Lys Arg

<210> 586 <211> 347

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (241)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (243)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 586

Glu His Asn Thr Asp Phe Asn Gly Ala Ala Leu Ser Arg Asn Leu Gln

Thr Phe Arg Leu Ser Thr Pro Cys Ala Arg Arg Glu Gly Arg Leu Leu

Arg Ala His Arg Arg Cys Pro Pro Tyr Ser Trp Arg Ser His Ala Ser 35 40 45

Pro Leu Pro Leu Gln Leu Leu Arg Ser Pro Ser Pro Arg Trp Val Pro
50 55 60

Gly Lys Leu Pro Gly Gly Ala Gly Glu Pro Leu Ser Gly Pro Gly Gln 65 70 75 80

Ile Pro Pro Trp Leu Arg Ala Trp Gly Thr Ser Leu Asp Gly Asp Ala 85 90 95

Ala Val Leu Gly Ala Gly Arg Gly Pro Asp Ser Gly Gly Val Asp Arg 100 105 110

Ala Lys Gly Pro Pro Pro Lys Ala Gln Arg Arg Glu Met Gln Gly Arg 115 120 125

Ala Gln Gly Val Gly His Cys Phe Gly Gly Gln Ala Arg Ser Leu His 130 135 140

Val Ala Ser Gly Leu Trp Lys Ala Val His Ser Pro Asp Pro Asp Leu 145 150 155 160

Arg Ser Gly Arg Arg Arg Leu Ser Pro Gly Pro Ala Leu Leu Glu Phe 165 170 175

Leu Ser His Leu Leu His Ala His Pro Ser Gln Gly Arg Arg Ala Leu 180 185 190

Gly Pro Gln Gln Ala Arg Glu Ser Ser Gly Leu Arg Pro Pro Asn Gly 195 200 205

Leu Ser Ile Gly Gly Trp Val Arg Arg Gly Val Gly Ala Leu Ala Gly 210 215 220

Thr Arg Ala Ser Pro Arg Gly Pro Gly Arg Arg Ser Pro Leu Leu Thr 230

Xaa Arg Xaa Leu Glu Pro Pro Gly Glu Val Phe Asp Pro His Ile Leu

Glu Leu Glu Gln Val Leu Gln Ala Pro Tyr Leu His Leu Gln Asp Leu

His Gly Leu Leu Arg Gly Gln Gln Leu Leu Leu Phe Ser Asp Leu

Glu Asp Glu Ala Gly Val Ala Leu Gln Arg Pro Val Ile Arg Trp Arg 290

Pro Arg Arg Arg Pro Val Pro Ala Glu Leu Thr Pro Ser Leu Gly 310

Val Arg Asp Thr Phe Thr Ser Gly Leu Leu Gly Tyr Thr His Ile His 330 325

Val Ala Thr Ala Ile Leu Gly Ser Gln Leu Leu 340

<210> 587

<211> 26

<212> PRT

<213> Homo sapiens

<400> 587

Thr Asp Phe Asn Gly Ala Ala Leu Ser Arg Asn Leu Gln Thr Phe Arg

Leu Ser Thr Pro Cys Ala Arg Arg Glu Gly 20

<210> 588

<211> 25

<212> PRT

<213> Homo sapiens

<400> 588 Arg Cys Pro Pro Tyr Ser Trp Arg Ser His Ala Ser Pro Leu Pro Leu

Gln Leu Leu Arg Ser Pro Ser Pro Arg 20

<210> 589

<211> 24

<212> PRT

<213> Homo sapiens

```
Gly Ala Gly Glu Pro Leu Ser Gly Pro Gly Gln Ile Pro Pro Trp Leu
                                                        15
                                    10
Arg Ala Trp Gly Thr Ser Leu Asp
            20
<210> 590
<211> 30
<212> PRT
<213> Homo sapiens
<400> 590
Leu Gly Ala Gly Arg Gly Pro Asp Ser Gly Gly Val Asp Arg Ala Lys
Gly Pro Pro Pro Lys Ala Gln Arg Arg Glu Met Gln Gly Arg
                                 25
<210> 591
<211> 23
<212> PRT
<213> Homo sapiens
<400> 591
Gln Ala Arg Ser Leu His Val Ala Ser Gly Leu Trp Lys Ala Val His
Ser Pro Asp Pro Asp Leu Arg
             20
<210> 592
<211> 20
<212> PRT
<213> Homo sapiens
<400> 592
His Pro Ser Gln Gly Arg Arg Ala Leu Gly Pro Gln Gln Ala Arg Glu
                                    10
                  5
Ser Ser Gly Leu
             20
<210> 593
<211> 27
<212> PRT
<213> Homo sapiens
<400> 593
Ile Gly Gly Trp Val Arg Arg Gly Val Gly Ala Leu Ala Gly Thr Arg
 Ala Ser Pro Arg Gly Pro Gly Arg Arg Ser Pro
```

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<210> 594
<211> 25
<212> PRT
<213> Homo sapiens
<400> 594
Glu Pro Pro Gly Glu Val Phe Asp Pro His Ile Leu Glu Leu Glu Gln
Val Leu Gln Ala Pro Tyr Leu His Leu
            20
<210> 595
<211> 28
<212> PRT
<213> Homo sapiens
<400> 595
Val Pro Ala Glu Leu Thr Pro Ser Leu Gly Val Arg Asp Thr Phe Thr
Ser Gly Leu Leu Gly Tyr Thr His Ile His Val Ala
            20
<210> 596
<211> 12
<212> PRT
<213> Homo sapiens
His Thr Leu Phe Ile Ser Phe Leu Trp Ala Glu Gly
                 5
<210> 597
<211> 28
<212> PRT
<213> Homo sapiens
<400> 597
Met Leu Pro Val Phe Val Leu Phe Phe Cys Phe Thr Tyr Ser Ala Arg
                                     10
Lys Gln Ser Val Phe Lys Lys Gly Asn Val Phe Glu
             20
<210> 598
 <211> 63
 <212> PRT
 <213> Homo sapiens
```

Cys Ser Leu Val Ser Ser Asn Ile Leu Phe Ser Phe Pro Phe Phe Gly

Gln Lys Ala Arg Cys Cys Leu Phe Leu Phe Tyr Phe Ser Ala Ser His 35 40 45

Ile Ala His Glu Ser Arg Val Tyr Ser Lys Lys Glu Met Cys Leu

<210> 599 <211> 52

<212> PRT <213> Homo sapiens

<400> 599

Ala Phe Phe Leu Leu Gln Ala Leu Glu Ile Gln Ser Gln Leu Ala Thr 1 $$ 10 $$ 15

Pro Ala Ser Ser Thr Ala Arg Asn Pro Ala Pro Asp Leu His His Pro

His Gln Pro Thr Ile Glu Arg Phe Cys Arg His Ser Ser Ser Trp Glu 35 40 45

Arg Ile Glu Tyr 50

<210> 600

<211> 27

<212> PRT

<213> Homo sapiens

<400> 600

Met Arg Thr Leu Phe Gly Ala Val Arg Ala Pro Phe Ser Ser Leu Thr $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Leu Leu Leu Ile Thr Pro Ser Pro Ser Pro Leu $20 \ \ 25$

<210> 601

<211> 10

<212> PRT

<213> Homo sapiens

<400> 601

Met Ala Tyr Ala Phe His Arg Thr Ser Thr

```
234
<211> 22
<212> PRT
<213> Homo sapiens
<400> 602
Leu Lys Ser Thr Tyr Thr Leu Leu Ser Ile Leu Trp Phe Leu Val Leu
                                    10
Ile Pro Val Glu Gly Asn
<210> 603
<211> 18
<212> PRT
<213> Homo sapiens
<400> 603
Gly Pro Leu Leu Ala Ser His Ala Thr Leu Cys Phe Ser Leu Gly Ser
Lys Phe
<210> 604
<211> 42
<212> PRT
<213> Homo sapiens
<400> 604
Ala Thr Val Pro Gly Ser Ile Tyr Asn Tyr Phe Tyr His Tyr Asn Ala
Gly Ala Leu Lys Pro Glu His Ala Ser Glu Ser Pro Arg Gly Leu Cys
                                 25
Ala Gln Thr Ala Gly Pro Phe Pro Ser Phe
<210> 605
<211> 56
<212> PRT
<213> Homo sapiens
<400> 605
Ile Arg His Glu Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu
Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg Ala Pro Pro His Val Ala
Ile Phe Cys Thr Leu Ser Arg Asp Gly Val Leu Pro His Trp Pro Gly
```

Trp Ser Gln Thr Pro Asp Leu Lys 50

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<210> 606
<211> 72
<212> PRT
<213> Homo sapiens
<400> 606
Ser Thr His Leu Gly Leu Pro Arg Cys Trp Asp Tyr Arg His Glu Pro
Leu Cys Leu Ala Pro Phe Thr Thr Ile Ser Ile Ile Met Gln Gly
Leu Ser Asn Leu Ser Met Pro Gln Asn Pro Pro Glu Gly Cys Ala His
         35
Arg Leu Leu Asp Leu Ser Pro Ala Ser Asp Ser Val Pro Pro Glu Trp
Gly Ser Lys Ile Ala Phe Glu Val
65
<210> 607
<211> 26
<212> PRT
<213> Homo sapiens
<400> 607
Leu Arg Val Gly Gly Thr Ser Glu Asn Cys Cys Arg Gly Glu Cys Cys
                                     10
Gly Ser Val Cys Ile Pro Pro Gly Arg Leu
             20
<210> 608
<211> 14
<212> PRT
<213> Homo sapiens
<400> 608
Ser Asn Ser His Thr His Thr His Val Lys Ser Phe Leu Arg
                                      10
<210> 609
<211> 15
<212> PRT
<213> Homo sapiens
<400> 609
Gln Pro Tyr Gln Val Leu Pro Ser Arg Gln Val Phe Ala Leu Ile
                                     10
```

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<210> 610
<211> 24
<212> PRT
<213> Homo sapiens
<400> 610
Val Phe Ser Cys Ile Tyr Gly Glu Gly Tyr Ser Asn Ala His Glu Ser
                                    10
Lys Gln Met Tyr Cys Val Phe Asn
             20
<210> 611
<211> 18
<212> PRT
<213> Homo sapiens
<400> 611
Arg Asn Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile Gly Val Leu Ala
Phe Leu
<210> 612
<211> 17
<212> PRT
<213> Homo sapiens
<400> 612
Leu Val Val Asp Ala Tyr Phe Pro Gln Ile Ser Asn Ala Thr Asp Arg
                                     10
                  5
Lys
<210> 613
<211> 25
<212> PRT
<213 > Homo sapiens
<400> 613
Ser Ala Leu Trp Thr Phe Leu Trp Phe Val Gly Phe Cys Phe Leu Thr
                                      10
Asn Gln Trp Ala Val Thr Asn Pro Lys
              20
<210> 614
<211> 72
<212> PRT
```

<213> Homo sapiens

```
<400> 614
Thr Ala Thr Leu Asn Ser Phe Phe Gly Gly Trp Gly Leu Ala Leu Leu
Leu Arg Leu Glu Cys Ser Asp Thr Ile Met Asp His Cys Ser Leu Asp
Leu Leu Gly Ser Ser Asn Pro Pro Ala Ser Ala Ser Gln Val Val Gly
Thr Thr Gly Ala Arg His His Ala Gln Leu Ile Phe Cys Phe Phe Val
Gln Thr Arg Ser His Ser Val Ala
<210> 615
<211> 47
<212> PRT
<213> Homo sapiens
<400> 615
Met Asp His Cys Ser Leu Asp Leu Leu Gly Ser Ser Asn Pro Pro Ala
Ser Ala Ser Gln Val Val Gly Thr Thr Gly Ala Arg His His Ala Gln
Leu Ile Phe Cys Phe Phe Val Gln Thr Arg Ser His Ser Val Ala
                             40
<210> 616
<211> 14
<212> PRT
<213> Homo sapiens
<400> 616
Gly Val Leu Lys Gln Ser Ser His Leu Val Leu Ser Lys Gly
<210> 617
<211> 21
<212> PRT
<213> Homo sapiens
<400> 617
Asp Tyr Ser Cys Glu Ser Leu Cys Pro Ala Leu Leu Ser Ile Ala Pro
                                     10
```

Asp Ile Val Leu Asn

```
<210> 618
<211> 27
<212> PRT
<213> Homo sapiens
<400> 618
Thr Thr Ile His Lys Thr Gln Leu Gly Ser Tyr Lys Ile Leu Trp Glu
Pro Lys Glu Gly Tyr His Asn Ser Thr Trp Ile
<210> 619
<211> 9
<212> PRT
<213> Homo sapiens
<400> 619
Ile Arg Glu Ile Phe Leu Arg Arg Pro
<210> 620
<211> 24
<212> PRT
<213> Homo sapiens
<400> 620
Leu Lys Phe Gln Lys Pro Gly Lys Ile Gln Met Arg Gly Gly Arg
                                     10
 Val Phe Trp Tyr Lys Asn Cys Lys
             20
<210> 621
 <211> 7
<212> PRT
 <213> Homo sapiens
 <400> 621
 Arg His Glu Pro Asp Pro Met
 <210> 622
 <211> 35
 <212> PRT
 <213> Homo sapiens
 <400> 622
 Ala Val Cys Thr Gly Gly Tyr Cys Glu Ser Cys Arg Cys Glu His Cys
 Val Cys Val Cys Val Asp Leu Cys Val Leu Phe Ser Gly Lys Glu Leu
                                 25
```

Arg Val Arg

<210> 623

<211> 72

<212> PRT <213> Homo sapiens

<400> 623

Val Ser Phe Phe Phe Val Phe Lys Trp Ser Phe Ala Glu Ile Lys Ser

Arg Glu Glu His Trp Ala Ser Leu Thr Pro Lys Pro Thr Leu Leu Ser 20 25 30

Ala Leu Leu Thr Cys Asp Val Leu Lys Ser Ser Ile Ile Phe Lys Cys 35 40 45

Cys Glu Ser Thr Glu Asp Lys Gly Phe Asp Ser Phe Phe Gln Ala Ser 50 $\,$ 60

Lys Asp Gly Ser Ser Ser Arg Ile

<210> 624

<211> 99

<212> PRT <213> Homo sapiens

<400> 624

Arg Ser Trp Gly Ser Gln Arg Ser Leu Cys Leu Leu Phe Ile Pro Phe 1 5 10 15

Ala Ala Glu Ser Tyr Ser Val Val Trp Met Gly His Leu Phe Val Val 20 25 30

Cys Leu Leu Ser Ser Trp Trp Thr Phe Arg Pro Phe Ala Leu Ala Val 35 40 45

Thr Val Asn His Val Ala Val Asn Ile Val Cys Val Ser Ala Trp Thr $50 \\ ~~55 \\ ~~60$

Cys Val Ser Cys Ser Leu Gly Arg Ser Cys Gly Leu Glu Gly Ser Phe 65 70 75 80

Leu Phe Pro Leu Glu Thr Leu Trp Phe Pro His Met Val Val Leu Cys 85 90 95

Leu Thr Phe

<210> 625

<211> 74 <212> PRT <213> Homo sapiens

<400> 625

Met Gly His Leu Phe Val Val Cys Leu Leu Ser Ser Trp Trp Thr Phe 1 5 10 15

Arg Pro Phe Ala Leu Ala Val Thr Val Asn His Val Ala Val Asn Ile 20 25 30

Val Cys Val Ser Ala Trp Thr Cys Val Ser Cys Ser Leu Gly Arg Ser 35 40 45

Cys Gly Leu Glu Gly Ser Phe Leu Phe Pro Leu Glu Thr Leu Trp Phe 50 55

Pro His Met Val Val Leu Cys Leu Thr Phe

<210> 626

<211> 51

<212> PRT

<213> Homo sapiens

<400> 626

His Asp Val Leu Gly Ala Arg Asn Ala Ala Cys Val Cys Cys Ser Phe 1 5 10 15

Leu Leu Gln Gln Asn Arg Ile Leu Leu Phe Gly Trp Ala Thr Cys Leu 20 25 30

Leu Ser Val Tyr Ser Pro Ala Gly Gly His Leu Gly Arg Leu His Trp

Arg Leu Leu 50

<210> 627

<211> 130

<212> PRT <213> Homo sapiens

<400> 627

Met Leu Asp Phe Lys Thr Ser Gln Val Ser Lys Ala Leu Lys Arg Val 1 5 10 15

Gly Phe Gly Val Arg Leu Ala Gln Cys Ser Ser Leu Asp Leu Ile Ser 20 25 30

Ala Lys Leu His Leu Lys Thr Lys Lys Lys Glu Thr Tyr Ile Thr Ser 35 40 45

Phe Thr Arg Ser Ile Met Ala Thr Phe Tyr Cys Phe Val Leu Lys Leu 65 70 75 80 His Ile Gly Glu Met Gly Thr Leu Gln Thr Ala Gly Gly Ser Lys Met 85 90 95

Thr Trp Pro Leu Gln Lys Ala Ile Trp Gln Phe Leu Lys Arg Leu Ser

Ile Lys Leu Pro Tyr Val Glu Thr Arg Glu Ser Pro Gly Glu Thr Lys 115 120 125

Asn Tyr 130

<210> 628 <211> 28 <212> PRT

<213> Homo sapiens

<400> 628

Leu Thr Arg Asn Ser Phe Pro Glu Asn Arg Thr His Lys Ser Thr Gln
1 5 10 15

Thr His Thr Gln Cys Ser Gln Arg His Asp Ser Gln 20 25

<210> 629

<211> 60

<212> PRT

<213> Homo sapiens

<400> 629

Leu Phe Tyr Leu Leu Thr Cys Ser Cys Ala Pro Gly His Leu Ala Phe 1 5 10 15

Val Cys Ser Gln Cys Leu Pro Phe Asp Met Gly Lys Glu Leu Trp Pro 20 . 30

Lys Ser Pro Ser Ser Cys Thr Ser Thr Ser Val Ala Gln Gly Trp Gly 35 40 45

Gly Arg Gly Arg Pro Ser Pro Tyr Ile Cys Val Val
50 55 60

<210> 630

<211> 61

<212> PRT <213> Homo sapiens

<400> 630

Ille Gln Gly Ser Arg Leu Pro Pro Leu Pro Ala Pro Leu His Pro Leu
1 5 10 15

Pro Leu Ile Tyr Leu Leu Leu Gly Ser Pro Ala Gln Ser Trp Leu Leu 20 \$25\$

Val Pro Ser Trp Gly His Pro Ser Thr Leu Thr Leu Thr Met Ala Ala

```
242
                                                 45
        35
                            40
Glu His Gln Ala Trp Pro Ser Gly Phe His Gly Asp His
                                             60
                         55
<210> 631
<211> 15
<212> PRT
<213> Homo sapiens
<400> 631
Met Pro Lys Gln Leu Ala Gln Leu Leu Tyr Arg Leu Pro Arg Gly
                                     10
<210> 632
<211> 46
<212> PRT
<213> Homo sapiens
<400> 632
```

<400> 632 Leu Phe Gln Ala Ile Ser Val Ser Gly Ser His Arg Gln Gly Ser Arg 1 5 10 15

Thr Trp Asn Thr Leu Thr Glu Gly Asn Ala Glu Ala Ala Cys Thr Val

Ala Leu Gln Thr Ser Lys Arg Leu Ile Leu Ala Ser Arg Trp 35 40 45

<210> 633 <211> 50 <212> PRT

neersers iningi

<213> Homo sapiens

 $^{<400>}$ 633 Thr Leu Ser Phe Met Asn Ser His Cys Val Pro Ile Lys Ala Leu Phe 1 51015

Phe Leu Ser Val Val Ser Tyr Ile Phe Ile Met Pro His His Ile Phe 20 25

Phe Thr Val Lys Ile Leu Lys Ser Cys Phe Gln Val Gly Gln Leu Met $_{35}$ $_{40}$ $_{40}$

Lys Leu 50

<210> 634 <211> 109 <212> PRT

<213> Homo sapiens

243 Arg Pro Thr Arg Pro Ile Thr Phe Ser Ser Asn Ile Ser Glu Trp Val Pro Ser Thr Gly Phe Gln Asp Leu Glu His Phe Asn Arg Arg Lys Cys Arg Ser Ser Leu His Ser Cys Phe Thr Asp Phe Gln Glu Ala Asp Ser Gly Phe Lys Met Glu Pro Trp Ser Trp Phe Phe Phe Phe Phe Phe Phe Phe Pro Gln Arg Thr Cys Gly Cys Ala Leu Cys Val Leu Phe Leu Phe Ser Ile Trp Gly Pro His Gly Lys Glu Leu Leu Asn Ser Phe Leu Tyr Glu Leu Pro Leu Cys Ser Tyr Lys Gly Pro Phe Leu Ser 105 100 <210> 635 <211> 8 <212> PRT <213> Homo sapiens <400> 635 Thr Lys Thr Ser Thr Pro Leu Arg <210> 636 <211> 35 <212> PRT <213> Homo sapiens <400> 636 Ala Ser Phe Gly Ser Cys Ser Leu Ser Leu Pro Cys Ser Ala Arg Glu Arg Thr Pro Glu Gly Gly Gly Trp Pro Gly Gly Arg Leu Ser Glu Pro Leu Pro Ala 35 <210> 637 <211> 7 <212> PRT <213> Homo sapiens <400> 637 Ala Pro Asn Val Val Leu Val

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<210> 638
<211> 6
<212> PRT
<213> Homo sapiens
<400> 638
Asp Gly Arg Leu Thr Phe
<210> 639
<211> 14
<212> PRT
<213> Homo sapiens
<400> 639
Pro Gly Ser Gln Val Val Lys Leu Pro Phe Ile Asn Phe Met
 1
<210> 640
<211> 9
<212> PRT
<213> Homo sapiens
<400> 640
Phe Leu Asn Ala Tyr Thr Asn Ser Pro
<210> 641
<211> 36
<212> PRT
<213> Homo sapiens
<400> 641
 Ile Cys Cys Pro Ser Arg Ala Ala Met Trp Ser Gly Leu Phe Thr His
 Leu Thr Glu Ser Trp Asn Asn Phe Lys Gly Leu Asp Pro Asn Tyr Thr
              20
 Thr Trp Met Asp
          35
 <210> 642
 <211> 6
 <212> PRT
 <213> Homo sapiens
 <400> 642
 Thr Gln Lys Phe Gly Lys
```

```
<210> 643
<211> 9
<212> PRT
<213> Homo sapiens
<400> 643
Asp Tyr Thr Ser Gly His His Ser Ile
<210> 644
<211> 21
<212> PRT
<213> Homo sapiens
<400> 644
Ser Asn Arg Val Glu Ala Trp Thr Arg Asp Val Ala Phe Leu Leu Arg
Gln Glu Gly Arg Pro
             20
<210> 645
<211> 8
<212> PRT
<213> Homo sapiens
<400> 645
Asp Trp Gln Asn Thr Asp Lys Ala
<210> 646
<211> 34
<212> PRT
<213> Homo sapiens
<400> 646
Tyr Leu Gly Leu Asn Leu Pro His Pro Tyr Pro Ser Pro Ser Ser Gly
Glu Asn Phe Gly Ser Ser Thr Phe His Thr Ser Leu Tyr Trp Leu Glu
Lys Val
<210> 647
<211> 8
 <212> PRT
<213> Homo sapiens
<400> 647
Asp Ala Ile Lys Ile Pro Lys Trp
```

<400> 648

Tyr Thr Lys Asn Cys Thr Gly

<210> 649 <211> 25

<212> PRT <213> Homo sapiens

<400> 649

D9973278 INTODI

Asn Ile Arg Ala Phe Tyr Tyr Ala Met Cys Ala Glu Thr Asp Ala Met

Leu Gly Glu Ile Ile Leu Ala Leu His 20

<210> 650 <211> 11

<212> PRT <213> Homo sapiens

<400> 650 Leu Asp Leu Leu Gln Lys Thr Ile Val Ile Tyr

5

<210> 651 <211> 15

<212> PRT

<213> Homo sapiens

<400> 651

Met Glu His Arg Gln Phe Tyr Lys Met Ser Met Tyr Glu Ala Ser 10

<210> 652

<211> 13

<212> PRT <213> Homo sapiens

<400> 652

His Val Pro Leu Leu Met Met Gly Pro Gly Ile Lys Ala 5

```
<210> 653
<211> 17
<212> PRT
<213> Homo sapiens
<400> 653
Val Val Ser Leu Val Asp Ile Tyr Pro Thr Met Leu Asp Ile Ala Gly
Ile
<210> 654
<211> 7
<212> PRT
<213> Homo sapiens
<400> 654
Asp Pro Asp Glu Leu Thr Asn
 1
<210> 655
<211> 6
<212> PRT
<213> Homo sapiens
<400> 655
Trp Lys Tyr Ile Ala Tyr
<210> 656
 <211> 82
 <212> PRT
 <213> Homo sapiens
 <400> 656
 Asn Phe Pro Glu Ile Thr Tyr Ser Leu Asp Gln Lys Leu His Ser Ile
 Ile Asn Tyr Pro Lys Val Ser Ala Ser Val His Gln Tyr Asn Lys Glu
 Gln Phe Ile Lys Trp Lys Gln Ser Ile Gly Gln Asn Tyr Ser Asn Val
 Ile Ala Asn Phe Arg Trp His Gln Asp Trp Gln Lys Glu Pro Arg Lys
 Tyr Glu Asn Ala Ile Asp Gln Trp Leu Lys Thr His Met Asn Pro Arg
                                          75
 Ala Val
```

```
<210> 657
<211> 12
<212> PRT
<213> Homo sapiens
<400> 657
Phe Pro Glu Ile Thr Tyr Ser Leu Asp Gln Lys Leu
<210> 658
<211> 18
<212> PRT
<213> Homo sapiens
<400> 658
Asn Tyr Pro Lys Val Ser Ala Ser Val His Gln Tyr Asn Lys Glu Gln
                 5
Phe Ile
<210> 659
<211> 9
<212> PRT
<213> Homo sapiens
 <400> 659
 Gly Gln Asn Tyr Ser Asn Val Ile Ala
<210> 660
<211> 7
 <212> PRT
 <213> Homo sapiens
 <400> 660
 Arg Trp His Gln Asp Trp Gln
 <210> 661
 <211> 8
 <212> PRT
 <213> Homo sapiens
 <400> 661
 Pro Arg Lys Tyr Glu Asn Ala Ile
         5
```

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249
<211> 89
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 662
Glu Asn Phe Leu Leu Arg Tyr Lys Gly Pro Ser Asp His Trp Ile Gly
Leu Ser Arg Glu Gln Gly Gln Pro Trp Lys Trp Ile Asn Gly Thr Glu
Trp Thr Arg Gln Leu Val Met Lys Glu Asp Gly Ala Asn Leu Tyr Val
Ala Lys Val Ser Gln Val Pro Arg Met Asn Pro Xaa Leu Ser Trp Val
Leu Leu Cys Tyr Pro Gly Trp Ser Ala Val Xaa Thr Ile Val Ala His
Cys Ser Leu Asp Phe Pro Gly Ser Lys
<210> 663
<211> 63
<212> PRT
<213> Homo sapiens
<400> 663
Glu Leu Thr Ala Ile Lys Ser His Gln Tyr Val Leu Gln Ala Ala Cys
Pro Glu Ser Trp Ile Gly Phe Gln Arg Lys Cys Phe Tyr Phe Ser Asp
Asp Thr Lys Asn Trp Thr Ser Ser Gln Arg Phe Cys Asp Ser Gln Asp
Ala Asp Leu Ala Gln Val Glu Ser Phe Gln Glu Leu Val Arg Lys
                          55
<210> 664
 <211> 17
 <212> PRT
 <213> Homo sapiens
```

<222> (9)

```
Trp Ile Gly Leu Ser Arg Glu Gln Gly Gln Pro Trp Lys Trp Ile Asn
Gly
<210> 665
<211> 12
<212> PRT
<213> Homo sapiens
<400> 665
Cys Pro Glu Ser Trp Ile Gly Phe Gln Arg Lys Cys
<210> 666
<211> 16
<212> PRT
<213> Homo sapiens
<400> 666
Asn Phe Leu Leu Arg Tyr Lys Gly Pro Ser Asp His Trp Ile Gly Leu
                                     10
<210> 667
<211> 50
<212> PRT
<213> Homo sapiens
<400> 667
Ala Ser His Leu Arg Leu Leu Ser Ser Trp Asp Tyr Arg Phe Pro Ile
Leu Gly Ala Gly Glu Cys Ala Tyr Leu Asn Asp Lys Gly Ala Ser Ser
Ala Arg His Tyr Thr Glu Arg Lys Trp Ile Cys Ser Lys Ser Asp Ile
His Val
     50
<210> 668
<211> 76
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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HARLE & HOUSE

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